They Forgot to Remember Pearl Harbor by P. F. COSTELLO

276 PAGES!

AMAZING STORIES

JUNE 25c

THE AVENGERS BY WILLIAM P. McGIVERN

AMAZING STORIES

VOLUME 23 NUMBER 6

JUNE 1949

PITYROSPORUM OVALE, the strange "Bottle Bacillus" regarded by many authorities as a causative agent of infectious dandruff.

It may be Infectious Dandruff!

START TODAY WITH THE TESTED LISTERINE TREATMENT THAT HAS HELPED SO MANY

TELL-TALE flakes, itching scalp and inflammation—these "ugly customers" may be a warning that you have the infectious type of dandruff, the type in which germs are active on your scalp!

They may be a danger signal that millions of germs are at work on your scalp . . . including Pityrosporum ovale, the strange "bottle bacillus" recognized by many foremost authorities as a causative agent of infectious dandruff.

Don't delay. Every day you wait, your condition may get worse, and before long you may have a stubborn infection.

*Use Medical Treatment**

Your common sense tells you that for a case of infection, in which germs are active, it's wise to use an antiseptic which quickly attacks large numbers of germs. So, for infectious dandruff, use Listerine Antiseptic and massage.

Listerine deals out death by the millions to Pityrosporum ovale and other germs associated with infectious dandruff.

Those ugly, embarrassing flakes and scales begin to disappear. Itching and inflammation are relieved. Your scalp feels fresher, healthier, your hair looks cleaner.

76% Improved in Clinical Tests

And here's impressive scientific evidence of Listerine's effectiveness in combating dandruff symptoms: Under the exacting, severe conditions of a series of clinical tests, 76% of the dandruff sufferers who used Listerine Antiseptic and massage twice daily showed complete disappearance of or marked improvement in the symptoms, within a month.

In addition to that, countless men and women all over America report joyously that this grand, simple treatment has brought them welcome relief from dandruff's distressing symptoms.

Start tonight with the easy, delightful home treatment—Listerine Antiseptic and massage. It has helped *so many* others, it may help *you*. Buy the large, economy-size bottle today and save money.

Lambert Pharmacal Co., *St. Louis, Mo.*

*THE TREATMENT

MEN: Douse full strength Listerine on the scalp morning and night.

WOMEN: Part the hair at various places and apply Listerine Antiseptic.

Always follow with vigorous and persistent massage. Listerine is the same antiseptic that has been famous for more than 70 years as a gargle.

LISTERINE

the delightful treatment

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CONTENTS FOR JUNE

» STORIES «

» FEATURES «

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Volume 16
Number 6

THIS month three new authors make their debut in AMAZING STORIES, one old-timer returns to the fold, and eight regulars complete a sparkling selection of no less than twelve great stories in this big (as usual) issue

We might as well do first things first and introduce the newcomers, so here they are Mr. and Mrs. Reader, meet—

EMIL PETAJA, who writes a short time-travel tale with an unusual twist, is a newcomer to the writing game, being just a youngster from out on the west coast But Julius Schwartz, his agent (now on Uncle Sam's call list), tells us he expects great things from the lad. We're inclined to agree, considering "Time Will Tell," the story in question.

E. K. JARVIS is our next to shake your hand. He's come at us out of nowhere, and we know little about him, except that his "The Man Who Was Two Men" struck us as a mighty fine job, and we hope he'll be back again—soon!

GERALD VANCE tickles our fancy with a rollicking yarn about the captain of a garbage scow Looks like this lad knows something about characterization, because we feel a warm spot in our midriff for the plucky little captain they call "Stinky," and his (also appropriately named) space ship, "Sweet Pea."

WHEN it comes to introductions, we know you won't need to be told whom we are talking about when we mention the name Earl Vincent Earl wrote some of the finest stories in the past decade that have come out of science fiction And he's written a good deal more than we care to count off word for word right now! He knows how to shake a mean typewriter, and the people who come out of his stories at you are pretty real people We think you'll agree with us when you read "Voice From The Void."

IT WOULD seem that the war had quite an effect on this particular issue "The Avengers," cover story for this month, written by William P. McGivern, foretells the future after the present war is over and it's a pretty exciting forecast, we can tell you! Don't miss this story by all means And the cover by Malcolm Smith ought to tickle you, too It's more proof of the ability of our new cover artist

THEN there's P F Costello's story based on the "remember Pearl Harbor" theme It ought to be read by every American, and filed away in his memory—because if this story turns out to be a forecast, it'll be a sad commentary on American Democracy. We just can't afford to "forget" Pearl Harbor! If you wonder why, just let Costello enlighten you—and at the same time, thrill and entertain you as only he can

JOHN YORK CABOT brings back the increasingly popular Sergeant Shane, in a story also based on the war, in which the doughboy spaceman does a little fighting, and a lot of his usual rather wacky "fixing" of things in general

REMEMBER when we forecast a story by Nelson S. Bond, a new serial about the North Pole? Well, that was a lot of hooey. What we really meant was about Cambodia, Indo-China, Angkor Wat! And what a yarn! The first part of this new two-part serial is in this issue, and it'll guarantee that we were wise in not letting the world in on its exact theme before we published it. So, pardon us for misleading you slightly, but we wanted to surprise you with the unexpected—and after all, this is the season for unexpecteds!

THE new series by Willy Ley, scientist, giving the authoritative picture of landscapes of other worlds, is ringing the bell, according to your fan letters. There's another one in this issue, and there'll be one in each issue from now on, until we've covered the Solar System from stem to stern. It might be a good idea for you to save these copies —they will constitute a collection of material you can't get anywhere else, and they'll help you to visualize interplanetary stories with greater facility Also, you authors might use the information contained therein to make your stories "pick-proof"

when it comes to the readers who like to pick up your errors and rub them in your hair!

WHILE science in America is trying desperately to solve the rubber situation, it seems to your editor that Mr. America who drives down to work each morning is demonstrating that he could use a little more common sense, and at the same time help those said scientists a bit. We refer to (in Chicago in particular) the amazing fact that seven out of ten cars driving an average of seven miles each morning, are occupied by only one person, the driver, while buses and "L" cars are jammed to unsafe capacity.

Why can't these drivers, cooperating with local "block captains," arrange to drive someone in their block down to work in the morning?

Which may not be science, but why leave it to science to do *all* the thinking?

RUSSIAN scientists have taken one from AMAZING STORIES! They have succeeded in grafting the corneas, taken from the eyes of corpses, onto living eyes. These corneas have been preserved by refrigeration and can be grafted more successfully than corneas from the eyes of living persons.

Injury to the cornea, the transparent tissue in front of the eye lens, causes blindness, but vision can be restored by grafting a healthy cornea onto the impaired one.

Until this significant discovery the cornea for grafting was donated by an older person wishing to help a young person, or from patients suffering from other diseases. The remarkable knowledge that corneas from the eyes of dead persons can be preserved for future needs makes the performance of this sight-restoring operation an easy one—even if an amazing one.

TALKING about such things, here's one for the asthma sufferer who can find no relief from morphine and adrenalin. You can play dirigible, and take on a load of helium (mix 80% with 20% oxygen and inhale deeply).

Because helium is so light, weighing one-third as much as air, the lungs do not have to work so hard inhaling. This treatment's specific benefits lie in the fact that it rests the fatigued muscles used in breathing, thus aiding them to recover their ability for normal breathing.

EVER watch a magician do his stuff with his "wand"? Well, that's not anything new, and it isn't such a hot trick today. Egyptian history carries many tales of the great magicians who performed wondrous miracles before their Pharaoh.

One such remarkable feat was throwing a stick on the ground and then changing it into a live snake. Today we know that secret. For example, a cobra can be grasped deftly, kept from moving, and then be induced to pass into a state of catalepsy wherein the reptile will become stiff and straight as a stick. But we don't think modern magicians are using cobras for "wands"!

LET'S blow up the joint! And just to make sure we do a good job, let's not fool around with something so petty as trinitroglycerine.

Science has found that inositol, the sugary material which is found in minute amounts in the human muscle and liver tissues, can be made from cornstarch and converted into an explosive more powerful than nitroglycerine.

If the expenses can be reduced, the little kernels of corn may prove an invaluable factor in our defense (oops, we mean offense) program. Inositol is the basic substance in this new all-powerful substitute for dynamite. The waste water in which corn is soaked in the process of manufacturing cornstarch renders the valuable inositol which can be converted into an explosive containing six nitrogen atoms known as hexanitroisitol. Trinitroglycerine, familiarly known as nitroglycerine has but three of these nitrogen atoms. Hexanitroinositol surpasses nitroglycerine for use as an explosive insofar as it is a solid compound and not a liquid—thus allowing it to be used directly as an explosive such as dynamite.

Dynamite is so useful because of its solidity making it easier to handle than a liquid explosive. The main disadvantage of dynamite is that it must be soaked up by non-reacting, sponge-like rare earths—the solid dynamite is only part nitroglycerine—the rest is an absorbent substance.

This waste material, inositol, will, in all probability, some day be the basic substance for all our powerful blasting agents.

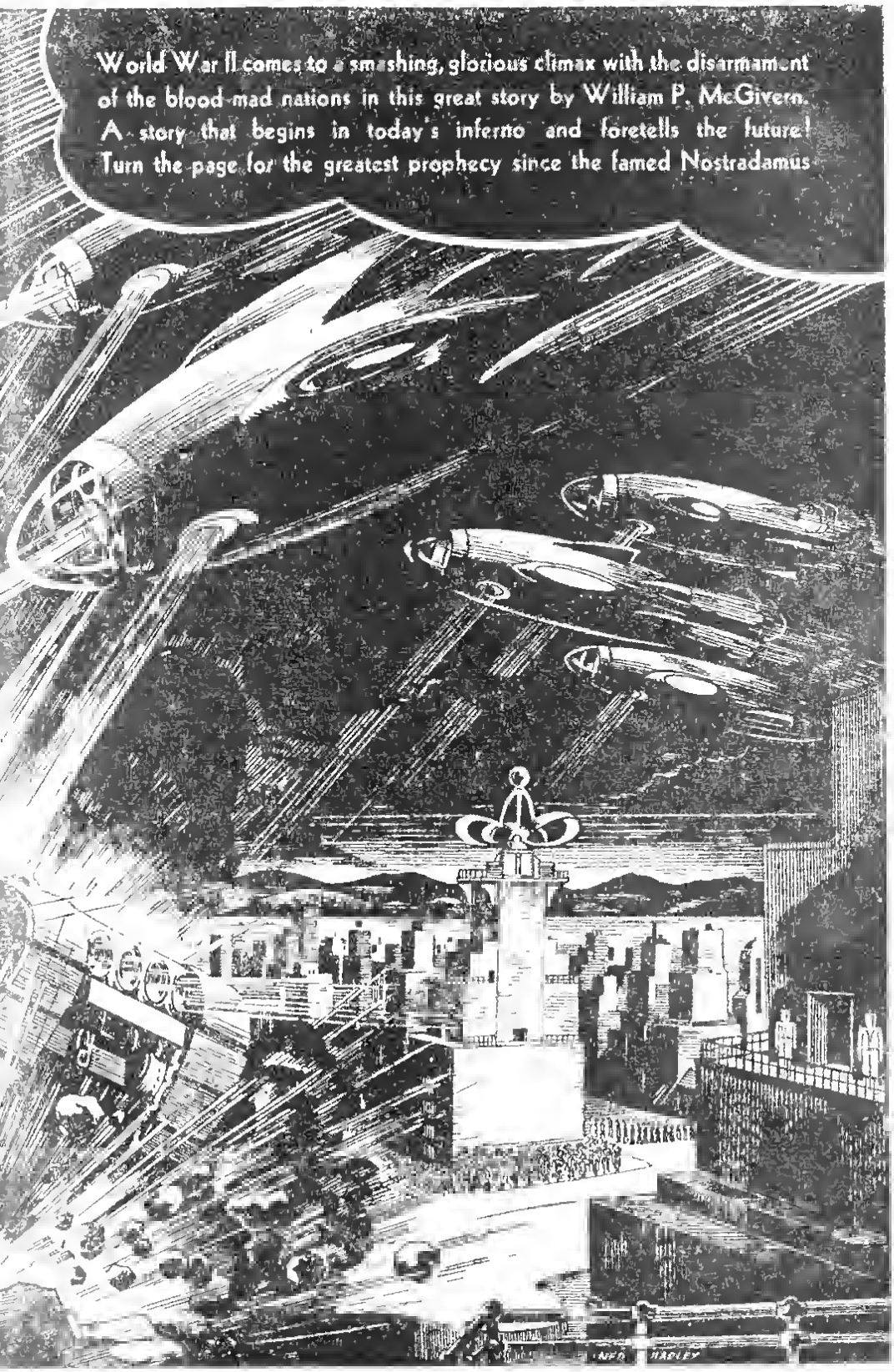
With that we'll blast off until next month! *Rap.*

"Junior! Stop playing with your food!"


THE
AVENGERS

THE AVENGERS

World War II comes to a smashing, glorious climax with the disarmament of the blood-mad nations in this great story by William P. McGivern. A story that begins in today's inferno and foretells the future! Turn the page for the greatest prophecy since the famed Nostradamus


World War II comes to a smashing, glorious climax with the disarmament of the blood-mad nations in this great story by William P. McGivern. A story that begins in today's inferno and foretells the future! Turn the page for the greatest prophecy since the famed Nostradamus.

DIRK MASTERS, chief engineer of the Standard Broadcasting System, made a last minute check-up of his equipment before handing the ear phones to his assistant.

"We're going to broadcast in about twenty minutes," he said rising to his feet. He was a big man and in the small, apparatus-clustered cabin he appeared almost huge. His hair was black and unruly, but his eyes were as blue as a baby's, although not quite so innocent.

Leaving the cabin which had been converted into a control room, he ascended the companion way to the deck. It was a brilliant day, cloudless and clear. The strong hot sun sparkled on the blue expanse of the Atlantic, shooting lances of dancing light into his eyes.

Larry Winters, Standard's top notch announcer was standing at the rail smoking a cigarette. Dirk joined him.

"Feeling a little nervous?" he asked. "You go on the air in about twenty minutes, you know."

Larry Winters grinned. "Not particularly. In fact I'm looking forward to this broadcast. After all the bloody battles I've been describing for the last eight years I'm fed up with war and misery and death and suffering."

"I know how you feel," Dirk said quietly. "Even though Hitler has been dead four years and his armies smashed to bits, it's still hard to realize it's all over and done with."*

"It's all over though," Larry Winters said emphatically. "Or after today it will be forever. When we send all the armaments of the Earth to the bottom of the Atlantic we'll be putting an end to war for all time."

"I'm not so sure," Dirk muttered.

Larry, who had been watching the horizon anxiously, suddenly grabbed his arm excitedly.

"Look, Dirk!" he yelled. "We're coming into sight of the flotilla. Lord, there must be two thousand ships in that fleet."

Dirk watched the majestic fleet which comprised all class ships of all the nations in the world as it slowly rose over the rim of the horizon and as their own fast launch approached it.

The vast fleet represented the navies of the world. Each ship was loaded to capacity with tanks and cannons and shells and powder. Many of them were listing dangerously from the heavy loads they carried. The mighty capital ships formed the outer ring of the vast circle, with cruisers, destroyers and submarines next in order. Inside the circle formed by the battle crafts were hundreds of barges loaded to capacity with machine guns, mortars, grenades and the other grades of smaller arms.

In the precise center of the ring was a solitary black barge, isolated from all other craft. On it was built a raised dais. On this dais rested a heavy, square leaden casket, grimly alone.

"I don't approve of the Tribunal's action in abolishing all armaments," Dirk said, "but one thing I'm glad to see go is that damned death ray. Anything that potentially dangerous should be destroyed."

"I AGREE there," Larry said. He shuddered slightly as his eyes focused on the black barge with its ominous burden, the leaden casket on the

* In the winter of nineteen forty-one Japan attacked America at Pearl Harbor and, some time later, Germany turned from the east and threw its might in an all-out onslaught on the British Isles. The United States entered the war and the conflict settled down to a long, costly war of attrition. Finally after four years Hitler was defeated, the enslaved peoples of Europe were liberated, and an International Tribunal was established to bring peace and security and democracy to the Nations of the World.—Ed.

raised dais. "It won the war for us undoubtedly, but it's too hellish to remain in existence. Anyway it has the spot of honor in the day's proceedings."*

"With that on the bottom of the ocean," Dirk said grimly, "We can all feel safer. If that instrument of death ever got into the hands of another Hitler it doesn't take much imagination to figure out what would happen."

"There'll never be another Hitler," Larry said impatiently. "A dictator rules by force of arms. And with no arms in the world, and every munitions factory under Tribunal surveillance, it would be impossible for a dictator to flourish."

"Let's hope you're right," Dirk said. He glanced at his watch. "Well, it's about time for us to get ready. Churchill and the President have finished their speeches and the radio-controlled planes are on their way now to blow this fleet into the middle of next week. And the public is waiting for you to tell them all about it. I'm going back to the control room now. I'll signal when I get the flash for New York."

"Okay," Larry said. He moved to the microphone which was set up near the rail and adjusted it to his height.

Dirk descended to the control room and took the headphones from his assistant. While he awaited the signal from New York, he made a few last adjustments on the control board.

In a few minutes he heard the first faint thunder of the thousands of radio controlled fighting planes which were heading to meet the vast flotilla in a rendezvous of roaring death.

Dirk felt a peculiar feeling of pride in the people of Earth as he heard the increasing sound of the planes nearing their suicidal meeting with the armada of naval forces. This destruction of the terrible weapons of war was tangible evidence that the people of Earth had learned their lesson and that they were prepared to make a future for themselves in which the horrors of war would be an impossibility. It was proof that civilization was advancing to its ultimate goal, that it was eradicating forever the most malignant cancer spot on the structure of peace and harmony.

As the huge squadrons of planes roared overhead he heard the signal from New York clearing the channels for the broadcast from the sea. With a flick of his finger he cut Larry Winters in and signaled him to go ahead.

An instant later Larry's clear, dramatic voice was in his ears describing to him and to the anxiously listening world the spectacular, devastating destruction of Earth's weapons of war.

"THE vast fleet of radio-controlled planes is hovering over the mighty circle of ships and barges," Larry's

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* The invention of the devastating weapon which the newspapers dubbed the "Death Ray" was the turning point of the war. Developed in America, it was capable of completely shattering all types of life, whether of vegetable or animal origin. Based on the principle that had made possible the discovery of U-235, it destroyed life by splitting the atomic structure of the cell into myriad organisms. It is somewhat consoling to realize that this deadly instrument of death was never actually utilized against humans. Once the knowledge of its existence reached the Third Reich the soldiers of Hitler's armies lost much of their fanatical desire to fight. Thus, when England and America invaded the continent of Europe they were able to smash the apathetic armies of Germany with comparative ease.

After the war settlement the International Tribunal decreed that all armaments and planes and ships would be destroyed to eliminate for all time the possibility of another costly, futile war.

For some time it was debated whether or not the "Death Ray" should be included in this general destruction of armaments. At least it was decided that its potential destructive power was too dangerous to leave in existence. Along with all other implements of war it was ordered destroyed. It was sealed in a leaden casket, along with the formula for its discovery and operation and towed out to sea on a black barge, to be sunk by radio-controlled planes with the rest of the world's war weapons.—Ed.

voice was loud in his ears and Dirk cut the gain down to check the volume.

"Like swarms of black buzzards waiting to swoop, the planes are poised, waiting their wireless orders to plunge downward and unload their lethal loads on the thousands of ships and barges in this two mile circle of death.

"And now their noses are dipping downward and thousands of the radio-controlled planes are screeching for their targets, a mile below them. In about another twenty seconds you will hear the first thunderous reverberations as tons of high explosives smash into the armor of the ships of the navies of the world."

The planes screeched down toward the targets

Dirk cut the volume down quickly, but when the terrific explosion burst in his eardrum it was like thunder magnified a thousand, a million times. He could feel, it seemed seconds later, the boat swaying as gigantic man-made waves rocked against it.

Their captain had backed at least ten miles from the circle of ships in the last half hour, but still the force of the explosion, as felt through the water, was terrifying.

Larry's voice came in again through the booming, echoing sound:

"That was the first dive. The planes are pulling out and zooming up for another attack. The smoke and flame make it impossible to describe this scene with accuracy, but I think I can see a number of great ships listing from the impact of bombs. Others are in flames. . . ."

At the control board, Dirk listened carefully as Larry described the epic scene of machine destruction. He heard, subconsciously, the motors of their launch thrum into life and then realized that they probably were moving still farther from the danger area.

A few seconds later the captain opened the control cabin and confirmed his guess.

"We're proceeding under full steam," he announced. "It's too dangerous to remain in this vicinity any longer. In a few minutes those planes are going to finish their job and then they just aren't going to pull out of their next dive. I can't take the responsibility of staying here any longer."

"Okay," Dirk said. "You're the boss."

He turned to his volume rheostat and rode it up a bit. Larry's voice seemed to be fading out. Strange . . .

Then—so suddenly that Dirk could hardly believe it—Larry's voice stopped abruptly and cold empty silence replaced it.

CHAPTER II

A Mysterious Attack

DIRK'S first frantic thought was that his apparatus had broken down, but a hasty check-up convinced him that the trouble was of some other nature. What, he didn't know.

For ten seconds he tried desperately to connect again with New York but it

was a futile attempt. There was nothing but silence in the ether.

Dirk felt a cold band of sweat beading his forehead. This was serious. It just wasn't possible that the Standard Broadcasting System had completely faded from the air.

Dirk bellowed for his assistant.

"Hang on here," he told him, shoving the headphones at him. "I'm going on deck."

He sprinted up the companionway and hurried to Larry's side. It seemed to be growing darker, the sun was half-hidden behind an ominous bank of heavy clouds and a hazy green phosphorescence was drifting across the surface of the ocean like a dank, strange fog.

They were drawing away at full speed from the explosive area, but the thick green fog that was rolling in on them blotted out everything within a hundred yards of the ship.

"I don't like this," Dirk muttered. "We must be fifteen or twenty miles away from the spot where the ships were anchored. We couldn't see them now anyway, but still I feel as if that fog is—is hiding something."

He watched the green phosphorescence spill over them like some liquid, forming tiny swirls and designs as it completely shrouded their boat.

He could see Larry only as a dim figure through the concealing vapor and he could hardly see the rail in front of him.

"I'm going below," he shouted. Somehow he felt that he had to raise his voice to be heard. "See if I can get New York."

In the control cabin he took the head phones from his assistant and opened the channel for Standard's New York key station. For ten minutes he waited, hearing nothing but an unintelligible crackling.

He was just ready to snap the switch off when, through the electrical sputterings, a faint, frenzied voice poured in.

Dirk tensed anxiously, cursing the static disturbance that drowned out the words. He turned the volume up to capacity, until the noise was deafening.

Then he made out a few words.

"*For—God's—sake,*" the straining voice implored, "d—don't—" The voice faded out altogether as the roaring static increased in volume.

Dirk swore impatiently and worked desperately at the controls. What had that voice been trying to say? To whom had it addressed that almost fanatical plea? He could feel a tight close feeling in his throat and the palms of his hands were damp with sweat. There was something unnaturally terrifying about that voice, that desperate, fear-crazed voice.

THEN he picked it up again.

"*New York calling . . . warning . . . too late . . .*" the desperate voice cracked and faded out, but he caught it again almost immediately. "*Blue ships . . . attacking . . . attacking everywhere . . . green fog. . . .*"

Dirk felt a moment of terror.

Green fog! What had the green fog to do with this unnerving business? Was it the same green fog that was rolling over the ship, even—his eyes flashed to the door—seeping through the keyhole and under the door of his control room?

The voice came in again. "Red *ships . . . blue ships . . . from God knows where . . . attacking . . .*"

The voice faded out again and then, while Dirk was dialing frantically, an ear shattering clap of noise and static blasted through the set, lasting about ten seconds. It was followed by a deep and somehow final, silence.

Dirk worked frantically to pick up

the voice again, to pick up any sound from the ether, but bis efforts were worse than useless. His mind was too stunned to function logically.

"God!" he muttered aloud. "What does all this mean?"

After another futile attempt to contact New York, he sprang to his feet and banged out of the control cabin. On the deck he found Larry, and several of the ship's crew staring anxiously at the western horizon.

The green fog was, if anything, denser and more impenetrable than it had been fifteen minutes earlier. But to the west, toward tbe direction in which New York lay, there was a vast white light spreading for miles in all directions. It was this phenomenon that had attracted the attention of Larry and the crew.

It was similar to the Northern Lights, except tbat it was constant and unvaryingly bright.

"For the Lord's sake," Larry exclaimed, as Dirk came alongside him. "What's going on?"

Dirk started to tell him of the voice be had picked up from the ether, but Larry grabbed his arm excitedly.

"Look!" he cried, pointing toward the vast expanse of bright light which lay over the western horizon like a great pall.

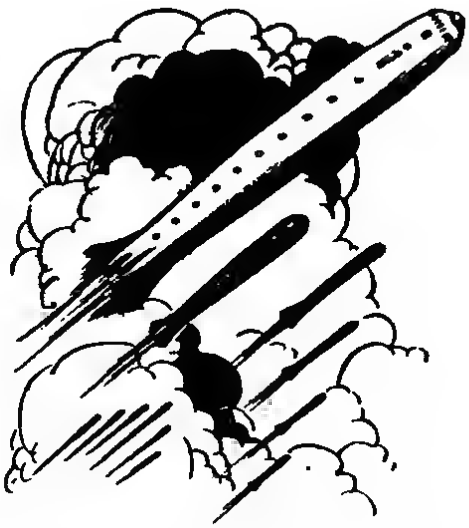
Dirk's eyes followed Larry's pointing finger. Through the wide area of brilliant light he could make out four great shapes moving with incredible speed. They were ships, airships, of some sort. Torpedo-like in shape, more than a bundred feet in length, they flashed through the chalk-white expanses of blinding light like mighty, fantastic sbarks.

TWO of the great ships were blue the other two, red. That was all be bad time to make out for, in the next instant, the four buge shapes had flashed over their beads, to disappear with a rush of air into the enveloping green fog.

"Did you see that?" Larry asked sbakenly.

Dirk nodded.

His attention was again attracted to the great white light that covered half the sky now, blotting out the faint rays of the cloud-hidden sun. More gigantic ships were coming into sight, flashing into the range of his vision for a brief instant and then disappearing like roaring phantoms into the green fog.



Great cigar-shaped ships flashed into view

This time be was able to notice that from the rear of the cigar-shaped ships a shower of fiery sparks trailed, mingling for an instant with the green phosphorescence of the fog before vanishing.

A terrible, frightening premonition was growing in Dirk's mind. A horrible certainty was growing in bim, born of what he had seen and heard in the last mad hour.

Tbese strange terrifying ships that flashed over their heads were not from any part of the earth. Tbey had come

from—a phrase from the frantic voice he had heard leaped into his mind—from God knows where.

What was their purpose? From the information he had received from that unknown voice it was easy to guess. Attacking . . . attacking everywhere. Those phrases came to his mind.

Were these attacking ships from outer space? From the stars? It was too fantastic to consider, yet there was no other answer to the mysterious, frightening questions his mind was asking.

The captain came up alongside the tense, watching group at the rail then.

"Well," he said, and there was a strange note of anxious besitation in his voice. "What will our course be? Stand by or continue to make for New York? I've been afloat for forty years but I've never seen anything like this. It's got me worried."

"I think," Dirk said, "we'd better stay on our course. Tbere's nothing to be learned out here. How long will it take us to reach New York?"

"A day, maybe two," the captain answered.

"Is that the closest land?" Dirk asked.

The captain shook his head. "Florida's only six hours away. Maybe we'd better put in there."

"It might be best," Dirk said.

ALL through that lowering, sunless, fog-filled day they made for the jutting finger of land that is Florida, and there was a feeling of gloom and despair on the boat that was as palpable as the enveloping green fog.

At dusk they were sailing blind. Their fog horn was sounding a dismal warning to other ships, but Dirk, standing alone at the rail, had the strange feeling that it was an unnecessary precaution. He had the feeling that they were entirely alone.

He had been standing there for possibly five minutes before he heard the faint sputtering sound. It was close and coming closer, but he couldn't locate its source. Then he realized that the sound was *above* his head.

He glanced upward and his breath caught painfully in his throat. He wanted to scream out but he couldn't.

For settling toward bim, through the swirling waves of phosphorescent fog, was one of the huge, sinister, torpedo-shaped air ships that they had been sighting all through the day.

From its bullet-like nose a beam of light suddenly shot forth bathing bim in a white circle of brilliant wbiteness.

The light flicked off immediately.

Dirk pitched forward against the rail. The white ray had seared him with angry heat, blinding him, robbing him of breath and strength.

He felt himself falling forward, but he was powerless to prevent it. He struck the water and there was no sensation of cold or wetness. Nothing.

He felt rather than heard a tremendous explosion near him, then mighty waves were rolling over him, tossing him around as a chip in a gale.

A wave flung him high in tbe air and when he struck water again it was only a few feet deep. With his last conscious act of reason he knew that he was being thrown up on the shore by the sea.

Then a black chasm opened before him and he was falling helplessly. His last sensation was one of infinite pressure closing inexorably on him.

CHAPTER III

Two Men on a Beach

ACROSS the wide expanse of shale and rock there was no sign of life.

A hellish maelstrom of fury broke as the planes dove—

The rock bordered the sandy beach of the sea and the only evidence of vegetable life in this arid stretch was the mossy slime that had gathered on these rocks.

The sun was strong and hot. It had completed half its trip across the heavens before anything in this desolate area moved . . .

The two men crept cautiously from a

A hellish maelstrom of fury broke as the planes dove—

—giant battleships reeled beneath stupendous aerial blows

—giant battleships reeled beneath stupendous aerial blows

hole in the ground and, after a careful, frightened look all about them and into the sky, particularly into the sky, they rolled a stone in front of the hole and stood up.

They were clad in coarse leather shirts and skirts and their hair was long and thick. One had very black hair and was stocky and heavily muscled. The other was taller better pro-

portioned, with light hair.

They moved cautiously toward the sea, pausing frequently to inspect the cloudless sky. In spite of their crude clothes and blunt axes, there was a look of intelligence about them. Their eyes were bright and alert, their foreheads wide and high. They looked intelligent, but also they looked as if their intelligence might be a handicap to them. For their passive, set features seemed to indicate that their intelligence was not an active ally with which they met their problems of existence, but rather a strong instinct, a *memory* almost, that they were in the process of forgetting.

One of them carried a leather sack over his shoulder and when they reached the beach he opened this up and began searching up and down the beach. His companion joined him. It was several minutes later before they came on a slowly crawling crab, making his awkward way to the blue-green water.

The black-haired man jerked his stone ax from his belt and pounced on the crab. One blow of the ax shattered its shell, stunning it. With another quick, almost automatic glance upward, he shoved the ax back into his belt, scooped the crab into the leather sack and tossed it over his shoulder.

Then the two men proceeded, eyes flicking constantly over the sandy beach and the rocks that lined it.

There were no words exchanged between the hunters. The task before them was a simple one and they both understood this. There was no need for communication.

In a half hour their sack was half full and they had wandered perhaps a half-mile along the beach.

It was while the black-haired hunter was stopping to thrust a stunned crab into the sack that his companion noticed something in the heavens that galvanized him into action.

He sprang forward, catching his kneeling friend by the arm.

"Look Jan," he said. "They come.'

THE man called Jan rose quickly to his feet and stared in the direction indicated by his companion's pointing finger.

"Yes," he muttered after a brief pause. "You are right, Karl. They come. They always come. Quick! We must hide."

The two men dropped to their knees and crawled to the sheltering shadow of the rock formation which skirted the beach. There they squirmed their bodies into a narrow crevice where an overhanging layer of rock partially concealed them.

Jan, the stocky, black-haired hunter, pulled his sack of crabs out of sight and then peered carefully over the rim of the rock.

The huge blue ship from which they had hidden was closer now. It was moving slowly, about a half-mile above the ground, close enough for the men to observe the rows of port holes along its side. The giant airship was over a hundred feet long, torpedo-shaped, with a fin-like contrivance at its tail. The nose of the cruising ship was set with a gleaming glass eye, almost two feet in diameter. From this, the men knew, a blinding, horribly painful ray could strike out with the speed of light itself.

Karl ran nervous fingers through his wheat-colored hair in an instinctive gesture.

"Did they see us, Jan?" he asked in a whisper.

Jan shrugged stolidly. "Maybe. We must hide till they are gone. If they see us it is bad."

The blue ship passed over them, its long shadow flickering over the ground like a premonition of disaster. Then it circled in a wide arc and headed back,

dropping lower and lower, until it was a scant hundred feet from the earth.

The blue of the ship was light and delicate and the sun's rays caught and sparkled on its gleaming surface like a beautiful kaleidoscope pattern.

The two leather-clad men trembled as the great shape drifted closer, like a marauding shark sure of its prey.

"They have seen us," Karl whispered in an agonized voice.

"There is nothing we can do," Jan answered fatalistically. "Do not move. They may go away."

The next maneuver of the hovering blue ship proved that this was wishful thinking. Its nose tilted downward and, with a sudden terrifying burst of speed, the ship flashed at them.

From its smooth polished belly a gleaming nozzle appeared.

Karl screamed.

A crackling, blinding bolt of light stabbed down from this nozzle as the blue ship levelled out and streaked away.

The livid bolt of power exploded into the rocky ground with a sputtering roar. Its searing, blasting force tore a huge hole in the granite-hard ground, scattering dirt and rocks in a wide arc. A minor landslide followed. Boulders and chipped rock slid down the short incline and fell with a heavy splash into the placid water. A burnt, acrid smoke poured from the ragged hole in the earth, and white powdery film of rock dust drifted in the air like a heavy fog.

JAN and Karl were still crouched in the narrow crevice not daring to move. They were not more than ten feet from the spot where the ray of light had struck the ground.

When the rock dust began to settle, clearing the air somewhat, Jan looked around cautiously. The blue ship was vanishing in the distance.

"They have gone," he said to Karl. "It is safe now to come out."

He crawled to his feet and looked at the burnt, blackened hole in the earth.

"They missed," he said simply. He rubbed his hand over his square, smoke-darkened face and there was a faint glint of anger in his eyes. "They are always after us and they do not miss very often. Sometimes I wish we could —do something."

Karl looked at him in slight amazement.

"What could we do to them?"

"We could fight!" Jan said with stubborn anger. His legs were spread wide apart and his deep, wide chest rose and fell rapidly. There was a belligerent thrust to his jaw.

Karl looked at him and sighed.

"You talk like a fool," he said. "You always talk about fighting even when you must know it is useless."

Slowly the light died from Jan's eyes. His thick shoulders slumped and he sboved a tangled lock of black hair from his eyes with a discouraged gesture.

"You are right," he said wearily. "I am a fool. It is best that those of you who are left should live in the caves in the ground and hide. That is the only way."

Karl nodded silently and picked up the leather sack of crabs. He was turning to retrace their steps along the beach when Jan's excited voice stopped him.

"Karl! Karl!" Jan cried urgently.

Karl wheeled, alert for danger, but Jan was pointing at the water where the rocks and debris had fallen. Huge foamy bubbles were churning the area into a green froth.

"What is it?" Karl asked, half-fearfully.

Jan shook his head dumbly.

Suddenly, through the frothing bub-

Karl and Jan turned the body on its back

bles and agitated water, they saw a darker substance coming to the surface. Tben an arm broke through tbe water and feebly struck out.

"It's a body," Karl cried excitedly. He glanced worriedly at Jan. "We must go. This might be trouble."

But Jan was already leaping across the shore, through the waves and into tbe water. With strong clumsy strokes be swam to the foundering body which the sea had so miraculously cast up.

Gripping his fist in the hair of its head be turned and swam toward shore, towing his unconscious burden bebind him.

Karl helped bim drag the body onto the beach. There they turned it on its back and regarded it with curiosity.

It was the body of a large young man with big sboulders and dark hair. Tbe face was strong, with rugged, even features. He was clothed in a porous material that wrapped around his legs in two cylinders. Two jackets of the same material covered his torso.

"He lives," Jan said suddenly. He bent down and placed his ear on the man's chest. He nodded after a moment. "He lives," he repeated.

"What will we do with him?" Karl asked.

"Take him to the cave," Jan answered. "He needs food and warmth."

Karl frowned. "That may not be good. Maybe we should leave him here. He is nothing to us."

"He is our kind," Jan said almost angrily. "He is not one of the—the otbers."

He stooped and placed his hands under the man's shoulders and Karl, still grumbling under his breath, lifted his feet. Moving slowly they carried their heavy burden along the beach.

CHAPTER IV

A Strange Awakening

AWAKENING was like swimming upward through miles of dense, green water. It was a gradual process tbat at times seemed endless and infinite.

For long periods Dirk Masters was floating at the point of consciousness but it was not until he had slipped back again and again into the dark recesses of oblivion that his mind finally broke the surface of the shimmering green water and he was able to see the light.

For a long timeless interval he lay on his back in the narrow stone room, staring dazedly, uncomprebendingly at the rough ceiling. Then his eyes closed wearily.

Jan sat on a rough stone slab at the side of the narrow cot watching the gaunt face of the man lying there. His face was wrinkled with troubled lines. This big man had been lying here for eight days now, lifeless except for a few incoherent mutterings which bad passed the loose lips.

Unconsciously Jan's hands tightened

anxiously. He didn't know why he was so worried about this man. It was nothing to him if he lived or died. Still, he was worried.

It was then that Dirk Masters opened his eyes for the second time and looked around him. This time there was a lucid light in the eyes, a questioning light that finally turned to Jan's immobile figure.

"W—where am I?" he whispered weakly. He couldn't remember much of what had happened to him. Somehow he had the disquieting sensation that he didn't *want* to remember.

The stocky man at his bedside was saying something to him.

"You are all right," Jan said. "You are safe. You did not drown."

Dirk turned his face away as a flood of incredible memories swept over him. They weren't tangible recollections, just vague terrifying half-thoughts that seemed more like the horrible miasma of a half-remembered nightmare than anything actual that had happened.

There was the wild, fleeting image of a huge blue ship descending on him through green fog. Then a blast of white hot light searing his very soul. After that there was water and waves and horrible confusion, climaxed by falling . . . .

He moaned and tossed fitfully on the cot. Everything was closing in on him with intolerable pressure . . .

He knew no more.

WHEN he awakened again Jan was still at his beside and he felt somehow more refreshed. His eyes were clear and while he was terribly weak, it was obvious that he was recovering.

He asked the same question of Jan again.

"Where am I?"

Jan started to tell him, but some intuition advised him that the information would only excite the sick man further.

"You are all right," he said. "You must rest."

With a terrible effort Dirk struggled to lift himself on one elbow. He *had* to get up. It was terribly important. Everything was crystal clear in his mind now. The destruction of earth's armaments, the materialization of the green fog, the onslaught of the mighty ships from space, all of these things he remembered.

Possibly everyone on board the broadcast ship had perished. He had a dim recollection of a great explosion as he fell into the water. Maybe that had been the boilers of the ship blowing up.

He shuddered at the thought. It was terrible to think that men he had talked and laughed with a few short days ago were now dead.

He reached out and grabbed Jan by the arm. He could do nothing for the dead, but there were still the living people of Earth to save.

"Listen to me," he said weakly. "There's no time to lose. You've got to warn the people that they might be in grave danger. Ships, huge blue ships are attacking. More of them may be coming soon. We—we've got to be ready to fight."

A worried look crept into Jan's eyes.

"We cannot fight the blue ships," he said softly.

"Damn you!" Dirk cried feebly. He made another attempt to rise but his body lacked the strength. He slumped back again, breathing heavily.

"You've got to do something," he said weakly. "If the people aren't warned these cursed blue ships may destroy everything, may conquer all of Earth."

Jan rose sadly to his feet and pulled the coarse coverlet up about Dirk's neck.

"You must rest," he said soothingly. "The tbings you speak of belong to the past. The men from the stars came in their blue ships many, many years ago and killed the people of Earth. That was a long, long time ago. No one who lives now is old enough to remember it. It was all so long ago that it is almost forgotten. You must rest and try to forget it too."

Dirk listened incredulously, a mad feeling of desperation welling up inside him.

"You're lying," he half sobbed. "You're lying to me. It happened yesterday. It happened . . ."

His voice trailed off as his eyes moved over the rough stone walls of the room and to the coarse leather clothes which Jan was wearing. What did this impossible nightmare mean?

"I won't believe it," be cried. "I won't believe."

Jan shook his head sadly and slowly left the room.

IT WAS ten days before Dirk could sit up, another ten before be was able to walk ahout. He was still weak but once on his feet his strengtb returned rapidly.

It was after he had been up for about five days that Jan allowed him to leave the small stone room.

"You are still weak," Jan stated arbitrarily. "Need much rest. I think some air would do you good. Come with me."

Dirk followed Jan out of the small stone room in which he bad been lying for almost a month into a larger room with a higber ceiling. The walls and floor were covered with the skins of small animals and in one corner there was fire under a crude pot, suspended under three crossed sticks.

The room was possibly twenty feet square and there were at least a dozen people in it. They were squatting on the floor, old and young alike, and they all stared at him with the silent curiosity of animals observing a new phenomenon.

Jan explained, "This is the main room of our tribe. Our caves extended far, but many of them are not occupied. Every year more and more die and are killed. Soon there will be none of us left."

He spoke with a fatalistic philosophy that was somehow terrifying.

He led Dirk then through several corridors lighted with burning strands of grease soaked rope which cast a flickering illumination over the rough walls and floor.

Occasionally Dirk saw youngsters peeking at bim around corners, their thin pale faces and wild long hair giving them the look of half-human animals. The faces disappeared with an accompaniment of squeaks and giggles every time he looked in their direction.

As they passed one corridor Dirk noticed that a heavy wooden door blocked its entrance. He wasn't sure, but he fancied he heard a faint, somehow familiar noise emanating from behind the tbick door.

He stopped. "What's down that corridor?" he asked.

Jan looked at the door, half fearfully, Dirk thought, and then grabbed him by the arm and pulled him along.

"No one go in tbere," be said. "Long ago the old men forbid anyone of the tribe to go near the room at the end of the tunnel. Keep away."

After a while they came to a crudely-cut stairway that led upward. Jan started up the stone steps, motioning Dirk to follow. At the top of the

The tribe gathered around a cook-fire

stairs Jan shoved a boulder to one side and a brilliant shaft of sunlight poured into the aperture, spilling its light and warmth over Dirk.

Dirk almost cried out his happiness. It had been eternities, it seemed, since he had seen the sun and the light of day.

HE CLIMBED eagerly through the hole, following Jan into the open. With eager expectancy he stared about. For fully a minute he stared in all directions, the hopeful light in his eyes slowly fading.

For the entire terrain before him was a burned and blackened scene of miserable desolation. Rock and shale and coarse yellow mud extended as far as his eye could reach. There was no vestige, no semblance of human habitation. Only the ocean which lapped against the forbidding shore was unchanged.

He remembered—it seemed like yesterday—advising the Captain of the broadcast boat to make for Florida. But this ugly, craggy, desolated land couldn't be Florida.

It was while he was looking miserably over the ruined plains that the words of Jan came back to him.

"The men from the stars came in their blue ships many, many years ago and killed the people of earth!"

That was what Jan had said.

Good Lord! That would mean that he . . . No! That was madness. It couldn't be.

It was a relief when Jan said a few minutes later:

"Come. We go down. It is not safe to stay out in the daylight too long. At night there is not so much danger."

Dirk followed Jan down into the gloomy cave, his thoughts spinning into mad impossibilities.

He was hardly conscious of moving and it wasn't until he passed the heavy solid door that blocked off the forbidden corridor that he snapped from his reverie.

He stopped, not realizing for an instant what it had been that had snagged his attention.

Then he heard it.

The muffled but familiar sound that he had noticed before when passing this grimly closed door.

For an unbelieving second he hesitated. It was impossible . . . still he couldn't be mistaken about a thing like that.

He grabbed Jan by the arm, jerking the stocky man about to face him.

"Jan," he said tensely. "Is there any way to get beyond this door? It's terribly important."

Jan looked at the door and there was a doubtful fear in his eyes.

"There is a key," he said miserably, "but it is forbidden—"

"Get it!" Dirk interrupted tersely. "We've got to get into the room at the end of that corridor."

Jan hesitated for an anxious instant, then with a clearly apprehensive look, he hurried off. Dirk waited im-

patiently, ear at the door, until he returned, carrying a thick ring to which was attached a long crudely-made key.

With fingers that trembled he took the key from Jan and inserted it in the door. The lock was rusty from long lack of use, but after a number of unsuccessful attempts, the door swung open with a groaning creak.

Dirk plunged into the dark corridor that stretched ahead of him and Jan followed bim, cautiously holding one of the rope candles to illuminate the black passage.

The narrow corridor was only about twenty feet long and Dirk covered the distance in several strides. A smaller door, standing half open, loomed ahead of him and the noise he had heard was now louder and more distinct.

It was a sputtering crackling, like the crumpling of cellophane or the frying of bacon.

As Dirk shoved througb the half-opened door into a small dank room the crackling sound faded out and a soft patient voice said,

"Calling. Please come in."

CHAPTER V

The Voice from Tibet

JAN cried out in terror at the sound of the strange voice, but Dirk leaped into tbe room, hope surging in heart.

"Light," he snapped to Jan. "Bring your light in here."

Fearfully Jan stepped into the room, holding the rope candle well in front of him, and peering about as if he expected the demons of hell to leap at him from the corners.

The light revealed a small, stone-walled room, no different than the others Dirk had seen in this underground habitation.

But built against one wall was a complete radio sending and receiving set, dusty and interlaced with thick spider webs, but still in working order.

Dirk knew it was in working order because from its loud speaker the calm, quietly patient voice was repeating:

"Please come in. If you hear our voice please come in. There is no danger. Please communicate with us."

Jan was fidgeting at the door.

"Is not good," he muttered. "Let us leave."

"Quiet," Dirk said impatiently.

He seated himself before tbe radio equipment and slipped the dusty head phones on. Then he made the necessary adjustments and picked up the small hand mike.

"Hello," he said. "If you can hear me please come in again."

He cut himself off and flicked the receiver on.

Almost instantly the smooth voice came in, but there was an undercurrent of tense excitement in it.

"I beard you. I can hardly convince myself I am not dreaming. We have been trying for several fruitless years to re-establish contact with your station. Why have you been out of contact all tbis time? Please come in."

Dirk cut himself in again.

"I can't answer your questions," he said. "I stumbled on this set only a few moments ago, just as you were speaking. I don't know anything about what has happened in the last few years. Please tell me who you are."

He cut the receiver in and waited tensely.

Again the soft voice came in.

"I am broadcasting from the land that was once known as Tibet. Our set is located in one of our ancient monasteries. Since the invasion of the murderous hordes from Saturn and

Mars, one hundred and fifty years ago, we have tried to keep the thread of human communication intact. We kept contact with the station you are using for many years, but a decade ago the thread was broken and we were beginning to despair of re-establishing communication."

DIRK did not hear the last half of what the voice said. His mind was dazedly trying to adjust itself to the enormous implications contained in the realization *that it had been over one hundred and fifty years ago since the day of the broadcast when he had first seen the mighty blue ships from space.*

One hundred and fifty years!

He became aware after a stunned instant that the voice had stopped, that he had automatically switched the receiving set off in his bewilderment.

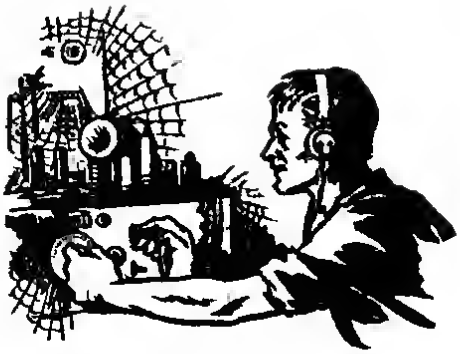
He cut himself in again.

"Please go on," he said shakenly. "It may sound incredible to you, but I witnessed the first of the invasion of Earth. I was stunned by a bolt of light from one of their ships and it was not until a few weeks ago that I regained consciousness. Please tell me what has happened since then."

The calm voice from the timeless land of Tibet came softly again into his ears.

"We Lamas have watched the rise and fall of civilizations and empires since the youth of Man, and we are not shocked or disheartened by the constant and seemingly periodic lapses of mankind into the degradation from which he originally sprang. Such things happen; that is all one could say of them. But this present debacle is of a different nature. Man's plight is now infinitely worse because he is beyond help.

"When the invaders came with their



Dirk seated himself before the radio, heart hammering

scientific methods of slaughter man was powerless to halt them. It is ironic to realize that the horrible invasion from outer space came at the time when Man had apparently solved his own Earth problems. War had been outlawed, the weapons of destruction were being consigned to oblivion, a golden era was truly dawning. Then came the combined hordes from Saturn and Mars to destroy utterly what it had taken Man fifty thousand years to achieve: peace.

"The men of Earth fought as best they could, retreating from the cities into the forests and farmlands, living and hiding in caves, venturing forth only at night for food. Many died. And as the years rolled on and as the inhuman creatures from space hunted down Earth people with unrelenting fury, the entire human race declined. They had nothing to fight with and after a hundred years of horror their children's children lost even the incentive to fight. So at last the people of Earth could be counted in the thousands, existing in ragged, barbarous hordes, living beneath ground, forgetting their heritage and pride as intelligent creatures of a great planet.

"Now there are only a few scattered groups of which yours is one. That is, I trust there are a few of that group

still alive. When our communication was cut off, there were still a few hundred left, still untouched by the ravages of the invaders. How long we can remain so is a question which time alone will answer."

THE voice faded out. Dirk sat before the set, staring unseeingly ahead of him, his mind trying desperately to absorb what he had learned.

It was staggering to realize that the earth he had known was no more; that alien beings from far out in space had completely conquered it, subverted it to their own uses; that the people of Earth now were little better than animals, living their frightened lives in caves and holes, scurrying from the light like cockroaches.

Still more staggering was the knowledge that the life he had known had been dead and in ashes for a century and a half. What strange fate had kept him living, when the time and place to which he belonged had been mouldering for fifteen decades?*

It was while he was vainly trying to readjust himself to the incredible situation that he became conscious of running footsteps in the corridor that led from the radio room.

He turned just as Jan barged through the door breathlessly, his eyes widened in fright, a mask of terror stamped on his face.

Dirk sprang to his feet.

"What is it, Jan?" he demanded.

"They have come," Jan said fearfully. "A blue ship has landed close to the opening of our cave. They are hunting us now."

CHAPTER VII

Discovered!

IT TOOK an instant for the impact of the words to register on Dirk. *They!* What a terrifying connotation there was in that impersonal pronoun.

They—the inhuman creatures from the black recesses of space—were hunting down the humans in this underground refuge as ruthlessly as man had hunted vermin. Man had become the vermin of Earth now, a pestilent species that the usurpers from space were anxious to exterminate.

He realized then that Jan was looking at him.

"What we do?" Jan asked.

The question jerked him back to the immediateness of their plight. Something had to be done—at once. He ran a hand nervously through his hair. Why was it his responsibility? It wasn't for him to decide what to do. There wasn't anything that could be done.

"Come on," he said abruptly to Jan.

He strode back through the now-dark corridor to the illuminated section of the cave. There was a cluster of frightened men and women at the base of the stone steps that led to the open. At the base of the stairs Dirk turned to Jan.

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* It is a possibility that Dirk Masters was stunned into a state of suspended animation by the bolt from the invading space ship. This plus the fact that he was obviously buried under tremendous pressure in an aperture created by the blasts from the ship might logically account for his remaining alive during the one hundred and fifty years. Many instances have been recorded of smaller animals living in a semi-suspended state for incredible lengths of time. Hermetically sealed under great external pressure, Dirk Masters' life functions slowed to an imperceptible rate and, for one hundred and fifty years, he remained in that apparently lifeless state. Then, when the blasts from the blue rocket ships shattered the ground and caused a disturbance directly over the crypt in which he had been sealed, he was liberated in the shallow water off the coast of Florida. The water and air revived him almost at once and, after a few weeks rest, the recuperative powers of the human system restored his strength and health.—Ed.

"How near is the ship to the opening of these steps?" he asked.

Jan shrugged and scratched his head. "I show you," he said finally.

Leading the way he scampered up the steps and moved the sliding stone that closed the opening about an inch.

Dirk crawled up alongside of him and peered through the narrow crack. About a hundred yards away was a huge blue ship resting on the rocky ground. At that range it seemed gigantic and wickedly invulnerable. It was shaped like a torpedo, with a blunt snout-like nose and long gracefully tapering body that ended in a pair of flaring fins. A series of small port holes lined the side of the ship that was visible to him. A rectangular opening in the center of the ship showed like a black cancer against the delicate blue sides. All of this was strange and incredible to Dirk, but it was faded into prosaic insignificance by the two *things* which were climing out of this slit-like opening.

They were wraith-like creatures, a dirty ivory in color, tall as a human but not more than five inches wide at the thickest parts of their bodies. Whether the ivory coloring was their skin or some kind of clothes was impossible to tell. At the bottom of their bodies were two thin appendages which served as legs. Their arms appeared to be solid at the shoulders but at the point where a human elbow would have been, a number of writhing tendrils sprouted. These twisting feelers hung almost to the ground and their hair-thin tips twitched and curled restlessly, seeming to have a separate life of their own.

Dirk shuddered looking at them. There was something horribly unclean about them that was nauseating.

At the top of their thin bodies were heads about the size of oranges. No hair relieved the hideous appearance of their leprous-white skulls. There were only two openings in their faces and these seemed to be eyes, large and solid-colored.

In the middle of their bodies were scabbards which held long slender rods. As he watched one of the creatures lifted his arm and the waving tentacles lifted up, curled about the thin rod and lifted it from the scabbard.

JAN slid the rock back in place. His face was white with fear.

"They come," he hissed to Dirk. "There is nothing we can do."

"Maybe you're wrong," Dirk said, thinking swiftly. "Didn't you say that these caves extend a great deal farther than the space you're actually using now?"

Jan nodded. "Yes, but—"

"Are there any other ways out?" Dirk broke in.

"Yes," Jan said, "there are three more openings. But we don't use them any more."

"Our only chance," Dirk spoke rapidly, "is to surprise them from behind. We'll use one of the other exits, have someone attract their attention from here while we slip up on them. It's our only chance. We've got to get them before they get us."

There was a puzzled frown on Jan's square honest face, but the fear left his eyes.

"But," he said hesitantly, "we have never fought them."

"Then it's about time we start," Dirk said grimly.

They descended the steps and Jan told the huddled group of humans what they had decided to do. Dirk, looking around at the white, frightened faces, felt his heart sinking. Most of the women and children had scattered off to the far dark corners of the cave. There were a dozen men at the base of

the steps, most of them strong and rugged, but there was a spiritless, defeated quality in their sbifting eyes.

One of them, a tall, blond young man objected frantically to Dirk's suggestion. He, Dirk knew, was Karl, the one who, along with Jan, had rescued him.

"It is not good," Karl cried fearfully. "We can gain nothing by fighting. They will send many more ships and kill us all. If we hide now only a few of us may be killed."

There was a murmur of agreement from the other men. Several of them edged away, anxious to scurry to dark depths of the caves to hide. Dirk felt a wave of anger sweeping over him.

"Listen to me!" he shouted. His eyes flashed from face to face raking the small circle witb a scornful look of contempt. "What kind of men do you call yourselves? Do you think you're ever going to win your liberty and freedom by hiding in dark corners like scared cockroacbes? You've got to figbt for it. If you can't live like men you can at least die like men. Now I want a man to act as a decoy, to attract the attention of those creatures from this side while Jan and I attack them from the rear. If there's a man among you, let him step forward."

THERE was a dead silence as Dirk's eyes flasbed from one face to another. The eyes of tbe men fell when they met his hot gaze. A minute slipped away and Dirk was forced to realize the bitter fact that be had failed. Failed to stir one latent chord of pride and courage in these poor whipped creatures.

His shoulders slumped despairingly. Then, as he started to turn away, an old man with a seamed, withered face and dirty white hair stepped forward and touched his arm timidly.

"My father talk the same as you do," he said, in a thin cracked voice. "He is dead a long time, but I think now he was right. We must fight. I do what you want."

Dirk seized the old man by the shoulders joyfully.

"You're damned right we're going to fight," he said fiercely. He felt suddenly uplifted, strengthened anew by this one example of indomitable spirit. If one would figbt the tribe would fight.

As rapidly as he could he explained to the old man what he wanted him to do. Then with Jan leading the way through the dark labyrinthine passages, be hurried to another set of stone steps, long unused, that led to the open. Jan gave him a crude blunt axe and equipped himself with another before they ascended the steps and, with infinite care, moved aside the cleverly-balanced rock that concealed the opening.

Dirk peered througb the narrow slit and his breath caugbt involuntarily in his throat.

The two wraitb-like, ivory colored creatures were less than eight feet away, facing bim. Their eyes were solid red blobs of motionless color. Against the unclean dead-white of their skins they stood out hideously clear.

Dirk had frozen into immobility, but as seconds passed and neither of the creatures advanced, he realized that they hadn't seen or heard him. The only sign of life displayed by the thin weird creatures was the restless waving of the long tendrils that hung from the solid roots at their shoulders. But these thin, writbing tentacles seemed agitated and wary, as if they sensed or felt the alien presence of Dirk and Jan.

Dirk tensed as the waving arms of one creature groped questingly forward in tbeir direction, writhing and twisting like the feelers of a bug.

Jan's face was white and strained, but not a whimper came from his tightly locked lips. He was hardly breathing and bis body was motionlessly rigid as a carven statue.

Dirk suddenly realized that these nauseating creatures *knew* of their presence. That, somehow, the waving tendrils had detected their nearness and were determining hy groping exploratory motions their exact hiding place.

A bead of sweat ringed his forehead. There was something horribly menacing in these silent creatures. Somehow he knew that when they discovered their position it would he all over for them. If the old man failed. . . .

That thought had no more than brushed his consciousness, when a wavering, challenging cry started his heart bammering with hope.

Peering through the crack Dirk saw that the old man hadn't failed them. A bundred yards away and hehind the ivory colored creatures, the old man had suddenly appeared—his weak voice announcing his presence with a torrent of derisive insults. Dancing like a dervish from one foot to the other, screaming his ahuse, he was one of the most wonderful sights Dirk had ever witnessed.

Everything depended on the alien creatures' reactions. For an instant they remained motionless, their groping feelers seemingly hesitant and uncertain. Then slowly tbey turned their backs to Dirk, their feelers drawing forth the sllvery rods from the scabbards at their waists.

DIRK gripped Jan's shoulder. This was their chance. The chance for which the old man had been willing to sacrifice his life. Jan's eyes were suddenly blazing hotly, the indecisive passiveness was gone from his face—forever. His thick gnarled hand curled around the shaft of his axe and a faint growl rumbled deep in his throat.

Dirk saw the look in Jan's eyes and gripped his shoulder tightly. Then he rose in a half crouch, tightened his grip on the thick haft of the axe and rolled the stone aside with one heavy shove.

With Jan at his heels he sprang from the opening. In two strides he covered the eight feet that separated him from the two dreadful creatures. His right arm swung in a vicious looping arc that buried the heavy axe three inches into the skull of one of the inbuman monsters.

A creamy white fluid gushed out in a burbling stream. The tendril growths of the almost decapitated creature flailed wildly about, groping desperately in the air like the arms of a tortured octopus. Obeying a cautious instinct Dirk leaped away from the threshing feelers as they waved desperately toward him.

The creature was in its death throes. The frantic tendrils began to shrivel, tbeir movement slowed to a convulsive twitching as the tbin body slumped forward without a sound except the scratchy rustle of its body on the rocky ground.

A strangled scream jerked Dirk around. Jan was in the grip of the other creature! His axe was lying on the ground and a white glue-like fluid was dripping from one limp arm of his horrible antagonist. But tbe other mass of tendrils was twined about Jan's arms and throat like powerful cables, slowly crushing the life from him.

The hoarse scream he had given was almost his last. His face was flushed red and a trickle of blood was running from his nose. His hulging frantic eyes met Dirk's witb a terrible look of entreaty.

Dirk sprang for the axe on the ground. His first wild swing missed,

as the wraith-like creature flitted to one side dragging Jan helplessly with him.

Tbe red motionless eyes of the weird being glared balefully at Dirk as he charged in again. Dirk aimed for those eyes, chopping downward with the axe in a powerful stroke tbat had all the weight of his body behind it.

The creature attempted to dodge the terrible blow. The red eyes glittered with a silent baffled anger as it realized escape was impossible. The next instant those solid red eyes disappeared forever as Dirk's axe crashed into the creature's face, transforming it to a formless pulp.

Sickened, Dirk watched the creature slump to the ground in silence, the tentacles of its one good arm relaxing their death grip on Jan's throat. For several seconds the rope-like tendrils twitched. Tben they were still.

CHAPTER VIII

A Flight to Tibet

FOR perhaps half a minute Dirk stood over tbe slain body of one of the horrors from space, breathing heavily. Then be hurried to Jan's side and ripped the creature's tentacles from his neck and body.

Before be was through Jan's eyelids fluttered.

"You saved my life," he whispered weakly. His band moved to his raw, swollen throat and touched it tenderly. Strengtb flowed rapidly back to bis sturdy body, and in a few minutes be was able to rise to his feet.

Dirk felt a savage sense of elation. In their first encounter with these dread beings they had come off victorious.

Looking about they found the two silvery bars which the alien beings had carried. They were obviously weapons of some sort and Dirk shoved them into his belt.

When they started for the entrance to the cave they saw that several of the tribe bad emerged and were huddled around a body sprawled on the ground. Quickening their pace Jan and Dirk hurried to the spot. Dirk elbowed his way througb the silent band of men and dropped to bis knees beside the

The creature tried to dodge Dirk's blow

crumpled form of the old man whose courage bad made it possible for Jan and bim to attack the invaders from the rear.

His seamed face was peaceful in death. Glancing at his body Dirk saw that it was pierced by a dozen small black holes that looked as if they had been burned tbrough him.

For a long moment Dirk knelt beside the frail old body, bis jaw hardening. The old man had been killed in the brief instant that Jan and he were leaping for the unclean creatures. Probably by the bellish silvery rods which he carried now. He felt a black hatred welling in him against the whole horde

of space men who had invaded Earth to ravish it, kill off its population and hunt down the few remaining humans like dogs.

When he rose to his feet Karl stepped up to him, his face flushed.

"This is your doing," he cried. "If we had not fought he would not be dead now. We should not have listened to you. You have killed him."

Dirk looked the tall, blond young man in the eyes and there was an infinite contempt in his gaze.

"He died as a brave man should," he said harshly. "Facing his enemy instead of hiding from him in dark corners."

TURNING to the rest of the silent men Dirk spoke hotly.

"You have seen what we can do when we fight. If we all fight together a time will come when we can come forth from the caves into the ligbt and live like men were made to live."

The eyes of the men changed under the empbatic words. Some of them were seeing a vision of tbe future, others were looking back at the legendary glory of the past, but all were affected.

That is, all but Karl. With a low mutter he turned and descended into the cave. Dirk paid no attention to his leaving. Karl was a problem he would have to meet later, he knew.

Motioning Jan to follow him he crossed the rocky ground to the huge blue sbip in which the creatures had come. The one opening in the side of the ship was a scant ten inches wide and he was forced to turn sideways to edge into its interior. Then be bad to pull Jan through.

Inside Dirk was not surprised to find that almost half the ship was given over to the mechanical equipment necessary to propel it. From the middle of the ship back to its tapering tail were rows of gleaming engines that fed their power to long exhausts. These exhaust pipes were almost a foot in diameter, much too large to serve only as a means of disposing of waste fumes.

In the front of tbe ship was a narrow cockpit which he squeezed into with difficulty. Directly in front of an intricate hoard studded with meaningless dials and indicators was a buge porous screen.

Its purpose was apparent at a glance for on it was recorded the rocky barren terrain wbicb the ship was facing. It was some sort of a visibility screen.

DIRK eyed it speculatively. An instrument like that would make tbe task of piloting the ship a comparatively simple one.

His eyes moved over tbe other controls. All of them were sbaped in long bars or metal loops. There were no solid round rheostats or dials. He realized that the bars and loops were probably designed to accommodate the filament fingers of the beings from space.

As bis eyes roved over the controls his mind worked subconsciously, guessing their uses, determining tbeir pattern of operation. Tbe symbols under the instruments were meaningless to him, hut be was able to make several deductions. The long bar, for instance, which swung in a circle to toucb a balf-dozen contact points was obviously an accelerator of sorts. And the loop below it might be sometbing like an ignition switcb.

It could move to but one position in its groove, so it obviously bad but one operation to perform. In the same manner his keen eyes traveled over the maze of instruments, locating, by guess, altimeters, barometers, heat and cold indicators, fuel gauges and compasses. A numher of controls were ahsolutely

unintelligible to him, until he remembered that this ship was capable of traveling through the void between planets and that the meaningless controls might govern navigation in space.

He wasn't interested in *them*.

Jan was waiting impatiently outside the control room, but it wasn't for another hour before Dirk turned from the instruments and looked at him.

"Jan," he said slowly. "I think we're going on a trip."

"Go way?" Jan deciphered bewilderedly. "Where?"

"Tibet," Dirk answered.

IT took Dirk three exasperating hours to establish radio contact again with the soft, patient voice from Tibet. When he did, he explained in terse sentences the fight with the invading creatures and their possession of the blue ship.

When the conversation was concluded fifteen minutes later the die had been cast. He had the location of the Tibetan monastery in his mind and he was determined to make the attempt to reach it.

There was no other course. Nothing could be gained or accomplished hiding here in caves. He had to take the chance of reaching Tibet. There, with the aid of the ancient wisdom of the Lama's, something might be done.

Two days later, with Jan as his sole companion, he left.

There had been much muttered discussion at the cave about the trip. It had been deemed an unwise move, hut since the two men were risking their own necks, no one made an attempt to dissuade them. None of them understood the motive of the trip.

Dirk sighted the snow-blanketed reaches of the Tibetan plateau nine hours after their take-off. The trip had been a hellish nightmare. With an unfamiliar ship, no definite instruments of navigation, it was luck alone that saw them through. Dirk had traveled most of the trip at a distance of more than twenty miles over the earth, to eliminate the risk of a sudden, unpremeditated dive plunging them to their death.

The incredihle speed of the ship made that precaution a useless one. *If* they had flashed into a dive at their speed nothing could have saved them.

He crossed Europe in two hours and circled wide to avoid the Himalayas in landing on the plateau. Following the Lama's directions he slowed his speed and settled cautiously, watching the visibility screen anxiously.

It was almost impossible to notice landmarks in the vast white scene that spread hefore him, but suddenly the screen showed the two huge black pillars which the Lama had mentioned. Their huge long forms stretched into the air like entreating arms, imploring the heavens for mercy.

They were unmistakable. He swung the accelerator bar completely around, but that was a mistake. The nose of the ship dropped in a dive as the hlasting engines in the rear of the ship faded into silence. The earth rushed up at them with incredihle speed.

Desperately, he spun the accelerator again. The blasting engines thrummed into life and the ship responded with a surging leap forward that slammed Dirk against the back wall of the control room.

They were only six feet above the snow covered plateau when he cut the accelerator again. This time the ship hit the ground, but the snow cushioned the fall and, miraculously, the friction slowed the ship in another thousand yards to a stop.

It was the climax of their phenomenal luck. Dirk knew he couldn't have duplicated the feat in a thousand years. But, thank God, he wouldn't have to.

He turned shakily from the control hoard and saw Jan standing in the doorway grinning at him. Jan had lost his look of supressed fear completely.

"Pretty good trip," he said.

DIRK wiped the sweat from his forehead with a hand that tremhled in spite of him. The hero-worship in Jan's eyes was a little emharrassing.

"Sure," he said. "Pretty good trip."

When he opened the slit in the door of the ship a stinging hlast of air cut rawly against his face and he realized then tbat neither of them were dressed for the hitter cold. He had supplemented his wardrobe with a knee-length leather jacket, but that was scant protection against the freezing temperatures outside the ship.

He looked out again through the swirling snow mists and this time he saw several bulky, fur clad figures struggling through the drifts toward the ship.

"Jan!" he cried excitedly. "We've found them."

Disregarding the cold he wedged his way through the narrow door and stumhled awkwardly forward.

His sensations were terrihly mixed. These were Tibetans, Mongols perhaps, hut they were humans, intelligent humans who still had the spark of pride and dignity in them.

When he met the first snow-hlanketed figure he was so overcome with relief and joy that he threw his arms about him and crushed him to his hreast like a long lost brother.

"Please!" a soft muffled voice said against his chest. "Do you always greet strange girls like this? You're crushing my rihs."

Dirk grabhed the small figure by the shoulders, his mind reeling incredulously. He hent closer and saw a young girl looking into his eyes. There was a gleam of humor in her dark eyes and a lop-sided grin on her cold-hlued lips.

"Hello," she said.

CHAPTER IX

Morma-Ri, Lama

THE underground rooms of the ancient Tibetan monastery were heated and lighted hy mighty log fires hlazing in immense hearths carved into the stone walls. Skins and rugs of fur

Fur clad figures struggled toward them through the drifts

covered the rough floor and the heams of the ceiling were hlackened hy the strong smoke of fires that had been lighted before the dawn of the Christian era. Scattered about the huge, high-vaulted room were a number of wooden benches and hefore the fires rude chairs had been built.

Dirk rested in one of these chairs, his feet stretched toward the roaring fire. In spite of the fact that he had heen fed and clothed in warm, dry garments, he was far from at ease. There were so many things he had to know that his mind was like a huzzing heehive of questions.

The strange girl had disappeared

when they reached the monastery and the two aged monks who had served food then were evidently deaf mutes. Their only answer to his anxious questions had been an inscrutable smile and a slight shrug. After filling his stomach Jan had promptly stretched out on the floor and dropped off to sleep.

Dirk glanced down at his recumbent snoring figure and grinned faintly. There were compensations to the uncivilized state he decided.

His own anxious musings were interrupted a few minutes later by a soft voice behind him which said:

"Welcome to our home, my good friend."

Dirk turned, startled. Standing behind him was a small, fragile monk, with a seamed, aged face and silvery hair dropping to his shoulders.

And alongside the monk, with a faint amused smile touching her lips, was the strange girl he had met so awkwardly a short while before. She was wearing a blouse and trousers of soft light leather that accentuated the slim feminine contours of her body. Her hair was dark and her eyes were the deep blue of mountain streams.

He found himself blushing under her smiling gaze.

"I am Morma-Ri," the aged monk said, seemingly oblivious to Dirk's preoccupation with the girl. "It is I who talked with you by radio. It is unnecessary for me to tell you how delighted I am that you have reached us safely. In this world that has known so much unhappiness we dare not even let ourselves hope for happier times. Still we cannot help but hope that your safe arrival is a symbol that the light will some day shine again through the darkness."

HE seated himself and the girl dropped to the floor at his knee. His hand, white and blue-veined, touched her dark hair in an affectionate caress, as he smiled at Dirk.

"You are wondering about her?" he asked.

Dirk grinned in embarrassment. "Was it that obvious?"

The girl smiled. "I'm afraid so. But you can't be blamed for being surprised. My people were the descendants of mis-

"I am Morma-Ri," the aged monk said

sionaries who were here when Earth was invaded. I was born here. The Lama's have raised and educated me. They call me Chiang-Lee but I think Lee is nicer, don't you?"

"W—why yes," Dirk stammered. "I think it's very nice."

"Then you'll call me Lee?"

"Certainly—Lee," Dirk said. "I'll be happy to."

Morma-Ri was smiling softly, almost to himself, but his bright intelligent eyes remained fixed on Dirk's face and he seemed pleased with what he saw there.

"You must tell us of yourself," he said finally. "There is so much we need to know."

Dirk told them everything he could remember, from the day, long years before, when he had first sighted the blue ships from space, to the fight which he

and Jan had had with the tendril-armed creatures a few short days ago.

When he had finished Morma-Ri gazed silently into tbe blazing fire, his eyes clouded. At last he sighed and said:

"The creatures you attacked and killed are the ones who came from Saturn. They inhabit the western coast of what was once known as the United States. The other invaders, by far the most numerous and dangerous, came from Mars. They have huilt a huge central city on the ancient site of New York."

"I didn't know that two separate planets had attacked Earth," Dirk muttered. "What was their purpose?"

Morma-Ri shrugged slightly.

"Why, for that matter, did ancient Spain send warriors to attack and claim the continent of North America? They desired it and, on the theory that might makes right, they simply took it. The invaders from space may use Earth as a link in their interplanetary chain, a trading post or source of raw materials."

"Have the races from Saturn and Mars always worked in harmony?" Dirk asked. "You know that when Spain claimed the continent of North America, the other nations of Europe promptly went to war with her."

"Apparently," Morma-Ri said, "Saturn and Mars have had no such trouble. They have evidently worked out an equitahle system to apportion the spoils of Earth. I seem to recall that in the past, difference arose between them, but that was long ago. A traveler who came here years ago claimed that he had seen one of the blue ships from Saturn fighting a red ship of Mars. But he was delirious from cold and exposure and he might well bave been mistaken. I see what you are thinking, my friend, but I fear it is a useless bope. If the invading races would kill each other off in a civil war it would leave the Earth once again to Man. We have all hoped for something like that to happen, but I am afraid it is merely optimistic thinking."

"Maybe not," Dirk muttered.

An idea, the nucleus of a daring fantastic plan was forming in his mind. It was simple and obvious, yet its implications were staggering.

"WHAT are you thinking, my friend?" Morma-Ri asked quietly.

Dirk hesitated, considering his answer. He wanted to be sure that Morma-Ri and the girl, Lee, understood exactly tbe danger of wbat he had in his mind. For himself he felt no fear or anxiety. This lack of concern puzled him a little. For he knew that in his own age he had heen no swashbuckling hero, but just a capable engineer, leading a pleasant, interesting life.

"I was thinking," he said at last, "that a man by the name of Hitler almost subjugated the world with the strategy of dividing and conquering. We might try something on that line."

"But that's impossible," the girl, Lee, said. "We are only a handful of weak, helpless humans. How can we divide two powerful, ruling races?"

"Our daughter speaks wisely," Morma-Ri said, nodding. "But what is in your mind, friend?"

Dirk leaned forward and the dancing flames from the fire caught the determined glint in his eyes, aud the square jutting angle of his jaw.

"We can try," he said grimly. "If the Martians thought the creatures from Saturn had attacked them, they would prohahly strike back, wouldn't they?"

But surely," Morma-Ri admitted.

"But how do you propose to make the ships of Saturn attack the Martians?"

"That's not my idea," Dirk said with a faint grin. "But *we* have a Saturn ship mounted with heavy weapons. And we know the location of the Martian city. Do we need anything else?"

"Oh," Morma-Ri said softly. "I understand, yes, I understand perfectly."

Lee clapped her hands together excitedly, her face radiant.

"It's a wonderful idea," she cried. Then she looked up at Morma-Ri and a determined expression changed her face. "And you just try to keep me from coming along," she said emphatically.

Morma-Ri smiled wearily.

"That will be decided later. Now there is much to be done."

CHAPTER X

Target—New York!

IT was two weeks later that Dirk sighted, from the control cockpit of the blue Saturn ship, the vast Martian city which the invaders from the red planet had built on the ashes of New York, stretching for mile after mile along the Atlantic coast.

Lee was standing beside him, peering excitedly as the screen in front of them mirrored the gigantic metropolis which they were approaching.

Jan and Morma-Ri were in the rear of the ship. It had taken the four of them almost the two complete weeks to prepare for the trip. They had food and clothing to last them several weeks.

Weapons had been their chief problem. Jan and Dirk were equipped with the silver rods which they had appropriated from the slain creatures from Saturn, but these were an unknown quantity so far as effectiveness was concerned.

Dirk had tested the blasting ray weapon which was part of the ship's equipment and was completely satisfied that it would be satisfactory for their purposes. With one short blast he had almost obliterated a hill of granite.

Cautiously, now that they were nearing their objective, he cut the speed and altitude of the ship until they were coasting a few hundred feet over the outlying segments of the city.

"It's beautiful, isn't it?" Lee breathed, eyes riveted to the visibility screen.

Dirk glanced up, then studied the controls again.

It *was* beautiful. Structures of shining white metal were built in perfect geometrical figures as far as the eye could reach.

All were of the same size and shape and color. They towered perhaps two hundred feet in the air and were in the form of perfect squares. Everything seemed to be constructed of the same brilliantly shining metal. Cutting through these white square structures, were broad avenues, almost a mile wide.

Figures could be seen moving on the ground, but it was impossible to determine any of their physical characteristics. From their height they appeared as short squat bugs scurrying over the ground. Vehicles moved through the magnificent streets and, in the air. A great distance away they could see several lazily moving red ships of apparently the same general shape and size as the one they were flying.

"Won't our blue color attract attention?" Lee asked, turning from the screen.

"That's the general idea," Dirk replied.

They flew on in silence for another few minutes, covering miles of the vast city of blocks. Dirk felt a feeling of helplessness sweeping over him as he

looked at the immense reaches of the Martian empire. Any effort of theirs would be practically unnoticed in this mighty, unending metropolis.

A FEW seconds later Lee touched his arm and pointed to the screen. On its silvered surface they could see in the distance a majestic structure which rose upward at least four times higher than any of the buildings they bad seen.

It too was formed in a square, but its color was a deep crimson. It covered at least a square mile of ground, looking like a huge drop of blood against the brilliant whiteness of tbe smaller buildings. Four mighty avenues flanked it, setting it apart from the rest of the city. There were no windows visible in the smooth surface of its walls, but then there were no windows in any of the huildings they had seen.

"I wonder what it is?" Lee mused. "Have you any idea?"

An ironical grin touched Dirk's lean features.

"I know just what it's going to be," he answered.

"What?"

"Our target," be replied. As he spoke his touch flicked the accelerator bar around. The ship spurted abead under its silent burst of power.

"Why tbat?" Lee asked.

"Simple enough. It's obviously some sort of headquarters, palace or main office. We want to make just as nasty an impression as possible so that's the logical spot to destroy."

Morma-Ri appeared at tbe narrow control room door. Fatigue showed in his seamed face, but there was an unquenchable light in bis keen eyes.

"We are ready to strike?" he asked, bis gaze traveling slowly over the visibility screen.

Dirk nodded. "A few minutes now. Then we'll head for the caves where Jan's people are biding. You'd better tell him to come up here. He'll be able to spot the landmarks in that section of the country better than I."

They were hurtling toward the immense blood-red structure at full speed now, and it loomed larger by the second in the screen.

Dirk lifted the nose of the speeding ship and picked up enough altitude to give him a chance to dive for his target. Then his band closed over the slender bar which served as a trigger for tbe ray gun mounted in the snout of the ship.

His eyes flicked momentarily to the visibility screen. They were directly above the huge blood red structure, diving toward it at tremendous speed. His fingers tigbtened on the firing bar.

"This is it," be said grimly to Lee.

Then be shoved the firing bar forward. Almost instantly a brilliant orange ray of light speared from the nose of tbe ship, leaping toward the crimson building with the speed and force of a lightning bolt.

THE result was instantaneous. The corner of the building struck by the bolt burst into belching blue flame and a deafening detonation sounded as segments of the wall crashed away from tbe structure.

A wave of flame and smoke leaped up at them, the force of the blast rocking the ship like a twig in a whirlpool. Dirk leveled out of the dive. As he did so the devastating orange ray flashed over the top of the building, leaving a trail of smouldering destruction in its wake.

Dirk was concentrating on tbe vizascreen with grim satisfaction in his eyes. So absorbed in the picture of destruction was he, that he didn't feel

Lee's tug on his arm until she'd repeated it a second time.

"Dirk," she cried. There was frantic urgency in her voice. "Dirk, the red ships up in the corner of the screen—"

Dirk's eyes flashed to where her trembling finger pointed on the uppermost corner of the screen. Tiny red dots were there. Red dots he hadn't noticed till this instant. Red dots that could mean but one thing—Martian ships, heading at them in a savage burst of speed.

They'd seen the attack, that much was obvious. And now they were streaking through the sky like avenging sharks.

Dirk adjusted his controls frantically and the speedy blue ship zoomed up from the smoking ruins of the majestic red structure in the center of the Martian city.

He didn't take his eyes off the visibility screen for an instant. The red dots were growing in size, were coming into sight as torpedo-shaped ships, deadly and grim.

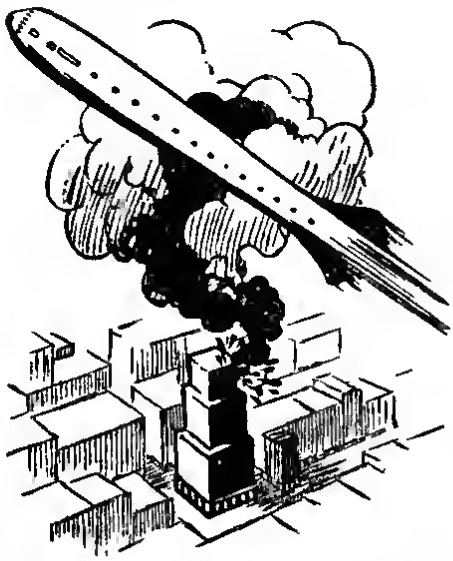
"They've certainly sighted us," Lee said tensely. "But that's what we wanted, wasn't it?"

Dirk nodded. "We wanted them to get a good look at the blue ship, but we might have done the job too well. It won't do us much good to start a civil war if we're burned out of existence before we can take advantage of it."

He swung the ship around and shoved the accelerator bar hard into place. He could feel the surge of power as they blasted away at bullet-like speed. For silent seconds they raced from the Martian city. Their speed was tremendous, but Dirk realized that the Martian ships were probably just as fast and—there were hundreds, thousands of them.

Morma-Ri was suddenly back at the door again.

"The Martian ships are not following," he said breathlessly. "From the rear port window I have watched them. They stopped at the burning red building and circled about. Later hundreds more of the red ships rose from the ground and joined them. When the sky was dark with their number, they formed formations and flashed away toward the setting sun. They are heading west—toward the city inhabited by the invaders from Saturn. We are safe for the time."



The bolt struck the corner of the building

"I WONDER why they didn't follow us," Dirk muttered.

"Perhaps," Lee said, "they didn't want to waste time chasing one ship. They evidently decided to avenge the attack on their city with an attack on the Saturn city."

"Possibly you're right," Dirk said.

"The Saturns won't be expecting an attack," Lee continued excitedly. "They'll be caught completely by sur-

prise. The Martians may wipe them out completely."

"Isn't that a pity," Dirk said cheerfully. He glanced at the visibility screen for an instant, then turned to Morma-Ri. "Get Jan," he ordered. "I'll need him pretty soon to pick out a landing place for us."

When Morma-Ri had gone, Dirk looked down at Lee and grinned. He felt suddenly a feeling of confidence and elation that, he felt sure, had nothing to do with the fact that a beautiful, dark-haired girl was within arm's reach.

"The first round goes to us," he said jubilantly . . .

"NOW," Jan said, pointing at the visibility screen. "Now we go down."

It had taken them perhaps an hour to make the trip, following the ragged Atlantic shore line to the peninsula that once had been known as Florida. The terrain which was mirrored in the visibility screen was strange to Dirk, but Jan seemed positive, so he dipped the nose of the ship in a long glide. Things were breaking so luckily that he hardly dared hope that their good fortune would continue. If they *had* succeeded in precipitating a civil war between the planetary beings that had invaded Earth, and if they could weld the few remaining humans into a closely knit band they might . . . Dirk shook his head tiredly. There were too many "ifs" involved.

He landed the ship but it was not until he crawled from its slit-like door that he realized that Jan had called the shot accurately. They were only about a hundred yards from the main entrance to the underground cave where Jan's tribe lived. Dirk recognized the large, oddly shaped boulder which marked the opening of the tunnel.

Lee's slender figure slipped through the narrow door without difficulty and she dropped to the ground beside him. She gazed slowly about at the barren, ravished landscape.

"It's not very pretty," she said, at last.

"It was once," Dirk said slowly. "Before they came it was one of the most beautiful spots in the world."

He helped Jan through the ship's door, but Morma-Ri decided to remain inside. The aged monk's kindly face was pale under its saffron coloring.

"I will rest here," he said. "The task of scrambling over boulders and rocks I must leave to you, the young."

With Jan in the lead and Dirk and Lee following hand in hand, they left the ship, making for the cave entrance. Jan was about twenty feet ahead of them when he reached the mouth of the cave and shoved the boulder aside with one quick powerful thrust.

He started down the steps, a glad smile of anticipation wreathing his stolid features.

Then he stopped—every muscle of his body freezing into immobility.

"What's the matter?" Dirk called anxiously. In another instant he was beside Jan, peering down into the interior of the cave. When he straightened a few seconds later his face was gray with horror.

"What is it?" Lee asked. Her blue eyes traveled anxiously over his face. She was moving toward the cave entrance when Dirk caught her shoulders.

Gently he took her away from the tunnel entrance.

"Wait here," he said. "Jan and I have to go in, but you mustn't."

HE turned back to the cave. Jan was still standing rigidly on the crude stone steps, his eyes riveted on the scene that had sickened Dirk.

Wben Dirk approached, he started slowly down the steps. Dirk followed him. At the bottom both men paused, looking ahout them.

There were about five bodies or parts of bodies scattered about the rough floor. Bodies, which despite their hideously seared and blackened condition, Dirk recognized as belonging to members of Jan's tribe.

"Wait here," said Jan. "You mustn't go in the cave."

There was a torso, with but one arm remaining, several pairs of legs that looked as if they had heen seared in a furnace. Decay had set in, giving the scene its final touch of gruesome borror.

Silently, Dirk and Jan moved on to other sections of the cave, dreading the thought of what they might find. The radio room was destroyed completely, the mechanism melted down into twisted wreckage as if hy an acetylene torch.

But tbey found no more bodies. Even the far, unused recesses of the caves were completely empty of humans—dead or alive. The four or five hodies at the hase of the steps were the only tangihle evidence of the fact that the caves had been inhabited only a few weeks before by forty or fifty human beings.

Puzzled, they were starting back tbrough the dark passageways when to their ears came a scream, terror-filled and desperate. Dirk's hlood chilled.

"Lee!" he gasped.

AS HE spoke he galvanized into motion. Jan at his heels he raced through the twisting corridors, his heart hammering with fear, not for himself, but for Lee. There had only been the one, frantic scream—then silence. That could mean tbat wbatever bad scared her had gone, or it might mean . . .

Reaching the base of the steps he abandoned caution and plunged upward. Jan was at bis side as they sprang from the cave entrance into the bright sunlight.

A scream sounded behind him and, wheeling, Dirk saw Lee. Tbe dark baired girl was struggling wildly with two stocky figures whose bodies seemed covered with green scale-like flakes. In one sweeping glance Dirk saw more of the greenish creatures swarming from tbe ports of a sleek red ship which had landed not more than a few yards from the cave entrance.

These figures moved forward with swift jerky strides, almost like mechanical dolls. Their bodies were shaped in a near-human pattern, but their faces were impassive and expressionless as they charged forward, jerking weapons from belts at their waists.

Lee screamed again and Dirk felt a torrent of blinding rage sweep over him. He sprang forward cursing like a madman, but the wave of charging figures surged over him before he had taken two strides.

He lashed out at them with both fists, all of the weight of his heavy shoulders hehind each blow. At his

side Jan was baattering at them with fists that fell like bludgeons.

But their efforts were less than futile. The stocky, emotionless, expressionless creatures charged inexorably into them, the blows glancing harmlessly off their faces and bodies.

Dirk grimaced in pain as his fist smashed into an unyielding, rock-hard face. Staggering back, he saw Lee being carried toward the red ship, still struggling and fighting.

"Damn you!" he raged, hurling himself again at the horde of scaly creatures.

From the corner of his eye be saw Jan go down, flailing desperately at the figures wbo swarmed over him. Dirk leaped toward him, exposing his back momentarily. He didn't see the blow that crashed into the back of his head. All he knew was a moment of terrible blinding pain, then a sickening realization that he was falling into blackness. Through the mists that were enveloping his consciousness be heard a faint, far-away scream. He knew it was Lee, but his last desperate effort to crawl to his knees brought a wave of nausea and darkness rolling over him. He knew no more.

CHAPTER XI

In the Hands of the Martians

WHEN Dirk regained consciousness he was being dragged over a smooth, highly polished metal floor by two of the green creatures who had attacked them. His legs trailed behind him as his captors jerked him along. Their arms under his shoulders were as hard and unyielding as metal bars.

His bead ached throbbingly from the blow he had received and he almost fainted with pain when the arms which supported him were suddenly withdrawn and he fell forward to the hard floor.

For an instant be could only lie helplessly, experiencing a numb sort of relief slowly stealing over his body.

A voice, a sobbing, familiar voice, roused him from the lethargic stupor of pain.

"You brutes! You inhuman brutes have killed bim!"

Tbe words, anguished and frantic, filtered through the deep fog of pain and weariness into which he seemed to be settling. Something inside of him, something quite apart from his natural muscles, responded to that voice. With strength that was more mental than physical, be lifted himself from the floor and raised his head.

Lee, her eyes startlingly blue in her chalk wbite face, was struggling with two impassive, green-scaled creatures who were holding her, not more than a dozen feet from where he lay.

His eyes met hers and he forced a semblance of a grin to his lips.

"Don't worry, Honey," be said weakly. "I'm not dead yet."

"But you soon will be."

The words weren't spoken, for he hadn't heard tbem. Instead they had suddenly impressed themselves on his mind as definitely as audible words would have. It was a thought—but not one of his own. From some other source the words had emanated and stamped themselves with positive force on his consciousness.

Dazed, Dirk was hardly aware of the metal-hard hands again on his arms, lifting him from the floor and holding him erect. With an effort he shook his head from side to side, clearing it somewhat of the spinning shadows that were flickering in front of his eyes.

Gradually his vision cleared and he looked about, seeing his surroundings for the first time.

HE WAS standing in the approximate center of a majestically proportioned room. Its walls, ceilings and floor were composed of some hard, slick material that was the deepest emerald green in color.

In front of him was a buge dais that caught his attention immediately. For at its apex was a mighty control panel of some sort, almost thirty feet square. Its entire surface was pitted with bundreds of rheostats, indicators and gauges, meaningless to him, but indicative of brilliant mechanical intelligence in its designer.

Lee's voice attracted bim again.

"Oh Dirk," she cried, stralning helplessly at the expressionless creatures who held her, "I was so afraid you'd been killed."

He started toward her, but the iron hands on his arms instantly tightened. Beside the four silent green creatures who held him and Lee, he saw at least eight more lined up in a military column, facing the dais. Turning, he saw Jan's limp figure stretcbed on the floor. Two more of the emotionless guards stood beside his inert body.

"I might as well have been," he said bitterly. "We're as helpless now as we would be dead."

"An extremely intelligent attitude."

It wasn't a voice. Again it was a thought suddenly bombarded against his mind. Lee was looking at him incredulously. It was obvious that the same idea had been mysteriously forced on her consciousness.

"Dirk," she said faintly, "I heard—I thought—"

Lee's voice trailed off and she turned slowly, her eyes moving to the base of the monstrous control panel, with its thousands of intricate gauges.

Dirk turned too, in response to a command that struck his brain with an almost physical force.

He saw then what he had not noticed in his first glance at tbe huge, gadget-studded board.

At its base, seated in an ornately carven cbair, was a tall thin creature, a pale green in color. His head was huge, dwarfing the rest of his body into insignificance. Two large eyes, glowing with a smouldering light, regarded them appraisingly. At the left of this creature was a long device, similar to an organ key-board, over which one thin hand trailed slowly.

"I am Thogar. I rule here."

There was no doubt that the thought originated from the huge-headed creature on the dais. Its eyes swung slowly from Dirk to Lee.

"Emotion is an uncivilized quality," the creature's thought struck them again, "but I am guilty of feeling now. My feeling is one of anger. You miserable beings, by your subterfuge, have occasioned the destruction of the Saturnian city. Using one of their ships to attack us was a cunning move. It prompted us to retaliate by reducing to dust the entire colony of Saturn with all of its inbabitants. We do not regret this, but we regret being deceived by Earthlings."

"What are you going to do with us?" Dirk asked grimly.

The question seemed to amuse the creature on the dais.

"Such a question is typical of Earthling stupidity. You must die, as all Earthlings have died since we came."

DIRK felt a stubborn anger welling in him against the cold intellect that was embodied in the creature on the dais.

"Why *must* we die?" he demanded. "What right do you have to decide anyone's death?"

The ponderous head swayed slightly and the lambent eyes gleamed with a

suddenly brilliant light.

"You anger me," its thought lashed at Dirk. "That is extremely unwise of you. For you to imply an equality between us is tactless effrontery. Earth had no civilization until Mars brought one here. Our first task was to stamp out the crude life-forms peculiar to this planet. You are one of those life-forms, undeveloped, brutish, unintelligent. For that reason you must be eliminated. Millions of your species were teeming the surface of the planet when we arrived. In the place of that senseless profusion we have created robots to perform the elementary tasks which once were the task of low life-forms of Earth. Those creatures which are beside you, alert and ready to curb your savage impulses, are robots, subject only to my will."

Dirk glanced at the flat, mask-like faces and scaly bodies of the *things* which guarded him and Lee. It was with difficulty that he suppressed a shudder of repulsion.

"An intelligent being," Thogar's thought was coldly contemptuous, "would not be revolted by an economical machine. These robots have enabled the Martians to enjoy an existence unencumbered by the drudgery and meniality which were the principal characteristics of an Earthling's life. They have also made it possible for the survivors of Mars to devote their time exclusively to scientific pursuits."

In spite of Dirk's preoccupation with Lee's and his own safety, he could not repress his curiosity.

"How are they powered?" he asked.

"It would be impossible for you to understand. Their energy is generated from one mighty plant and fed to them individually through a modification of ether waves. Their wills are dominated by mine through simple thought transference. The theories involved would be incomprehensible to you. Incidentally, they are indestructible."

As he finished speaking, his huge head leaned back to rest against a specially constructed brace on the top of the carven throne.

At the same instant Dirk felt the hands on his arms tighten inexorably. Two of the robots were lifting Jan's still unconscious figure between them and carrying him toward the vast room's only door. Dirk was dragged along behind him and, twisting desperately, he saw that Lee was being brought along with them.

The grotesque, huge-headed Martian watched them dispassionately, not a flicker of expression touching his face as they were dragged away from his throne. His attitude rivaled the interest an Earth scientist might have displayed in watching the death throes of a malignant germ under the slide of his microscope.

THE impassive Martian robots dragged the three humans along a broad corridor with green walls and ceiling. They were not more than six feet apart, Jan in the lead, Dirk and Lee following.

Dirk twisted around and caught Lee's eye.

"Keep your chin up," he said. He tried to grin.

Lee matched his effort. "Do you think this is the—end?"

"Maybe," he said. "It's impossible to tell what that cold-blooded devil has in mind."

Their footsteps echoed hollowly in the corridor for several silent seconds.

"Dirk," Lee said suddenly, "What do you think happened to Morma-Ri?"

"Not much chance that he got away from the cave alive," Dirk answered. He heard Lee catch a quick breath. "I'm sorry, Honey," he said miserably,

"he meant a great deal to you, didn't he?"

After a moment Lee said, "Yes, he did." Her voice was perfectly steady.

They tramped along in silence again, the jerky mechanical footsteps of the robots sounding like the amplified noise of a troop of toy mechanical soldiers.

Lee broke the silence with a pitiful attempt at lightness. "You don't look very neat," she said. "Not from the back anyway. Your leather shirt is completely out of your trousers. If we're going to make an exit we should make a presentable one."

"Right you are, honey," he said, trying to match her mood. Absently his hands moved to stuff his shirt inside his belt. Suddenly he froze, every muscle and nerve in his body tensing rigidly.

His fingers had touched a slim metal rod. The slim metal rod, he instantly realized, that they had appropriated from the tendril-armed creatures from Saturn.

His hopes and thoughts quickened. If they could turn the weapon against these robot guards — Thogar's words suddenly sprang into his mind to mock his hopes. The huge headed Martian had said, that the robots were indestructible.

Then another thought struck him. These were the weapons of the invaders from Saturn. Wasn't it likely that they had been developed for possible use against the Martians? If they were, they might have an effect on the Martian robots. His thoughts were churning wildly. It was a chance, a desperate, million-to-one chance at best, but he had to take it.

His hands came away from his belt clutching the shining metal rod. He heard Lee's quick intake of breath. She had seen it. Had her robot guards?

"Easy, honey," he said softly. "Are your guards suspicious?"

"They don't seem to be," Lee said faintly, a little later. "I can't tell by looking at them. Oh Dirk be careful."

DIRK had the silver weapon before him now. His fingers ran rapidly over its smooth length, found nothing. Sweat was beading his face. The damn thing *had* to have a trigger of some sort. One of the ends of the slim tube had had an opening in it. The other end was solid.

They were approaching a door at the end of the corridor. If anything was going to be done it would have to be fast. Suddenly he remembered the tendril-like arms of the Saturnian creatures. They wouldn't have been able to pull a trigger, they would have to squeeze . . .

His hands closed carefully on the metal rod and he felt it give slightly under the pressure. They were almost at the door, there was not time to think, plan or even to hope.

He pointed the slim weapon at the back of one of the robots that was carrying Jan's limp figure. Then he squeezed tightly.

There was no sound from the weapon. No pellet or visible ray flashed from its muzzle. For perhaps three agonizing seconds nothing happened. Then, with a suddenness that amazed him, the robot halted, seeming to stiffen into rock-like rigidity. It twisted slightly, almost as if in pain, then, with a sputtering hiss, it crashed forward to the floor.

The other robots did not break their stride. Unseeing, unheeding they tramped on, marching over the fallen robot as if it were part of the floor. Swinging the slender weapon around Dirk flashed it over the two robots that were striding beside him. Within twenty feet their mechanically monot-

onous pace broke, they stiffened, then fell forward.

In another thirty seconds the remaining three robots were crumpled on the floor, lifeless machines.

Dirk sprang to Lee's side and held her close for an instant.

"We don't really bave time for this," he murmured, "but then we may never have time. This is one break for us, but we'll have to make our breaks from now on."

A faint moan sounded behind them. "Jan!" Lee whispered.

Together they hurried to the stocky Earthman's side.

Jan was sitting up between the two fallen robots, pressing both hands to his head, as if he were afraid it might fly apart.

Dirk helped him to his feet, where he tottered unsteadily.

"Feel all right?" Dirk asked.

Jan looked about at tbe fallen robots in astonisbment. "How—"

"No question yet," Dirk said. "The most important thing is have you still got the other rod like this?" He showed Jan the silvery weapon with which he had knocked out the Martian robots.

Jan fumbled uncertainly at his waist and finally pulled out the other weapon. Rapidly, Dirk explained its operation to him, then he glanced up and down the corridor.

"We'd better head back the way we came," he decided. "No point in going where they were taking us."

THEY bad not traveled fifty feet down the corridor when they heard the ominous tramp of heavy feet hooming toward them. Dirk halted and crouched against the wall. Suddenly, from the direction in which they were heading, a double column of robots appeared. They were emerging from an intersection of the corridor and marching directly for them, expressionless faces and grimly methodical stride, terrifying in their purposeful concentration.

Dirk held bis weapon ready and tersely ordered Jan to do the same. Against the overwhelming numbers they would have little chance, but all they could do was fight. He was on the verge of giving Jan the signal to start firing when Lee grabbed his arm.

"Don't!" sbe cried tensely.

"Are you crazy?" he demanded. "Jan! Cut loose."

He wheeled toward the marching column of robots, his band beginning to close on the handle of the slim weapon, when he noticed what Lee had seen from a distance.

Tbe robots were not coming for them, they were striding down the center of the corridor paying no attention to the three bumans crouched against the wall.

"Don't you see?" Lee whispered. "They're on some other inspection or duty. They won't bother us unless they bave been definitely sent after us. And that isn't likely this soon."

"Let's hope you're right," Dirk muttered.

The first of the robot column was abreast of them, but they passed by close enough to touch, without even turning their beads. Hardly daring to breathe Dirk flattered bimself against the wall as tbe entire column filed past, striding jerkily on down the corridor, to disappear around a corner a moment later.

"That's a real hreak," Dirk breathed. "We're safe until someone of intelligence discovers those knocked-out guards."

They continued on, passing several columns of robots within a few minutes. Dirk glanced uneasily about.

"This seems to be the main high-

way," he muttered. "Let's look for a side street."

They turned off at the next archway and after following this corridor for a few hundred feet they came to an open door. After a cautious glance into the room it led to, Dirk waved for Lee and Jan to follow him. Once inside he closed the door and set the time lock which fastened it.

Then he turned to inspect the quarters in which they had taken refuge. For an instant he couldn't believe his eyes as he gazed bewilderedly from wall to wall. The sight before him was not the most amazing he bad seen in this Martian city, but it was easily the most unexpected.

"WHAT'S the matter?" Lee asked gazing anxiously at him.

Dirk was too busy drinking in the scene to answer. The walls of the long wide room were lined with weapons and, in special cases and on benches and racks in the center of the room were more weapons.

But these were tbe weapons of 1948!

There was the improved Garand rifle next to the old model Springfield. Bayonets and small arms were also in evidence. Under each weapon was a tiny glazed card with a small symbol stamped on it. In one corner of tbe room was a trencb mortar, and a French 75 bulked largely in the opposite corner. Several glassed cases of hand grenades, tear gas bombs and other smaller implements were lined against the wall.

It was obviously some sort of museum or trophy room. From the small store of arms on Earth at the time of the double invasion, the Martians must have selected these as representative of the civilization they were usurping.

Dirk felt a strange nostalgia as his eyes traveled over the weapons, symbols in a sense, of the world from which be had been so abruptly transported.

He was just opening bis mouth to explain the display to Jan and Lee, when a sudden thunderous sound crashed through the room. Dirk could feel the floor tremble under the force of the impact.

Lee's eyes flew to the door.

"Dirk," she cried, "it's breaking in."

CHAPTER XII

Dirk Gives Battle

DIRK wheeled, saw at a glance that Lee was not mistaken. The door, massive and solid, was already hanging queerly at the bottom. Witb every terrible blow it weakened perceptibly.

That meant that the robot guards they had knocked out of commission had been discovered, that all of the robots had probably been put to the task of searching down the fugitives.

"What can we do?" Lee asked quietly.

Jan grabbed Dirk's arm and pulled him around.

"Look," he yelled, "door, another door."

Dirk followed Jan's pointing finger and saw another door in the opposite wall. It was closed, but it offered a chance.

"I stay," Jan said earnestly. "It will take them a little time to get past me," he added grimly.

"No soap," Dirk snapped. "We all go, or we all stay. Right, Lee?"

"Right," Lee said.

Jan shrugged and stepped to the door that promised them a retreat. One heavy tug and it was open and sunshine poured into the room.

"Swell," Dirk snapped, "now we—"

"Dirk!" Lee screamed.

Dirk bad beard the crash too. He

wheeled just as the heavy door fell inward and a half-dozen swiftly moving robots poured into the room.

He whipped up his silver weapon and, from the corner of his eye, he saw that Jan had done the same. The first three robots spilled to the floor as the deadly, invisible rays destroyed some vital section of their mechanism.*

But dozens more were spilling through the smashed door.

Dirk swung Lee around and shoved her toward Jan.

"Get through that door," he shouted at her.

"No," she cried, "I want—"

"Do what I tell you," he shouted. He was already springing toward one of the glassed-in cases that housed the grenades. Smashing the glass with his fist he jerked out a grenade, pulled the pin and heaved it straight into the crowded mass of robots fighting their way into the room.

It exploded with a detonating roar that almost ruptured his eardrums.† The force of its blast scattered robots like tenpins, smashing them back into the press still trying to jam into the room.

GRABBING two more grenades Dirk leaped for the door which Jan was still guarding. He hooked an arm about Lee's waist and jerked her through into the open. Jan was at his heels.

The robots had methodically reorganized their ranks after the devastating effects of the grenade and now they were storming across the room toward the door through which Dirk and Jan and Lee had escaped.

As they reached the door Dirk threw the second grenade. Its blast tore a hole in the floor next to the door arch. A rumbling thunderous noise trembled in the air for an instant, then a heavy section of wall caved in as the archway collapsed.

The robots caught under the sliding section of wall were crushed and mangled into twisted metal frameworks. More important the cave-in had sealed the doorway with tons of practically impassable weight.

"That gives us a breather for a while," Dirk muttered gratefully. "Now where do we go from here?"

They were in an angle formed by the walls of the building. The walls of the structure were a deep red and the building was the largest for as far as they could see. It was obviously the building they had attacked the day previous in the Saturn ship.

"That puts us in just about the middle of the city," Dirk decided.

They were on the edge of one of the magnificent avenues they had noticed from the air. To their right the land leveled down to a plateau in the middle of which was a solid square building, guarded by double lines of robots. There were no windows or apertures visible in the structure, but on its roof was a huge pinwheel, something like the elevator propeller of an autogyro, whirling at a blinding speed.

Dirk's eyes traveled over the building for an instant and then he snapped his fingers suddenly.

"I'll bet that's the plant that distributes energy to the robots," he said tensely. "Notice how well it's guarded,

* The secret of the power of the Saturnian weapon which Dirk and Jan have found so invincible, might lie in an adaptation of ether waves, which would "short circuit" the brains of the robots which are actually nothing more than receiving sets designed to pick up the thought waves of the master Martians.—Ed.

† It might seem incredible that a grenade would not lose its effectiveness in a hundred and fifty years, were it not for the fact that they had obviously been hermetically sealed under glass. This protection would render them as potent as the day they left the factory.—Ed.

yet there's no way in or out of it. That must he it."

The three of them were standing in the shadow of the red structure, intently watching the isolated building in the middle of the plateau. The angle of the wall obstructed their view of the hroad avenue and for this reason they didn't see the mighty, silently rolling Martian tank until it appeared abruptly on top of them. It stopped dead in front of them, trapping them in the corner formed by the walls.

Dirk shoved Lee behind him and pulled the last grenade from his pocket. With sickening clarity he realized how hopelessly futile would be a grenade against this monster tank.

It towered easily thirty feet in the air and was over a hundred feet long. Rocket exhausts were built into its sides like gills and its total effect was one of magnificent, irresistible power.

The sound of a clamp releasing came to them. Then a small door close to the ground swung open.

Dirk tensed, fingers taut on the pin of the grenade.

But he never pulled that pin. For the strength flowed from his body in one unnerving instant as he recognized the small figure that stepped from the tank.

"Morma-Ri!" Lee cried joyously.

CHAPTER XIII

Morma-Ri to the Rescue

THE small, serene Lama folded the excited girl in his arms and patted her shoulder gently. Dirk clasped his free hand fervently.

"How did you get away from the cave?" he demanded. "We'd given you up for dead."

"A very great deal of luck is responsible for my being here," Morma-Ri said calmly. "I was sleeping when the red Martian ship arrived and captured you. A robot creature clambered into the Saturn ship and flew it here. The robots paid not the slightest attention to me at the landing field. Later I found it comparatively simple to appropriate this machine after I had watched it heing operated. I came here because I knew it to be the heart and pulse of the city. It was here I hoped to find you, but I was far from optimistic about doing so. Our situation here is extremely precarious, I might say."

"You don't know the half of it," Dirk said grimly. He pointed to the demolished wall at their back, and explained the meaning of the sounds which could be heard through it.

"They're digging and battering toward us every second," he concluded. "Robots, hundreds of them, synthetically energized and damn near indestructible. It's curtains when they break through."

"Can we do nothing but wait for them?" Morma-Ri inquired gently.

"Nothing," Dirk said, "unless you know some way we can blow up that building down in the plateau." He pointed down at the square, heavily guarded structure. "That's the source of the robot energy."

Morma-Ri gazed long and thoughtfully at the structure.

"No," he said softly, "I know of no method that would accomplish its destruction."

Very slowly, he turned and walked toward the monster tank.

"Where are you going?" Lee asked.

"Nowhere, my child," he answered, smiling. "Nowhere at all."

When he reached the door of the tank he turned and faced them. A smile touched the corner of his lips, as if he were enjoying a private joke.

"My children," he said quietly, "I do what I must do and I do it without regret!" With a wave of his hand he stepped backward into the tank and slammed the door.

"Dirk!" Lee screamed. "Stop him!"

Already the mighty land tank, under the silent impetus of its rocket motors, was moving away.

"It's too late to stop him," Dirk said.

THE tank wheeled swiftly away from them and, with a sudden roar of power, plunged down the sloping hill that led to the heavily guarded structure, the source of the robot energy.

Dirk's arm tightened about Lee's shoulder as he saw what Morma-Ri had in mind. In a suicidal sacrifice he was going to drive the huge, thundering tank into that building; that building which was the pulse and heart of this entire city. If he succeeded . . .

Then Dirk saw the flashing space ships.

By the dozens mighty bullet-swift ships were racing to intercept the charging land tank. These ships were different than the ones that Dirk had seen previously. The slim elongated bodies were flanged by two widely flaring fins. Yellow and red in color the ships had the appearance of giant manta rays. In the tapering snout of each ship a rectangular beacon light swung back and forth ominously.

The huge roaring tank was half-way to its objective, gathering tremendous speed with every foot, when the space ships flashed from the sky above it. From the swinging beacon lights on each ship, rays of blinding light speared out, striking the ground on all sides of the tank with the force of lightning bolts. Smoke poured upward from the ground, ragged craters appeared magically under each stabbing blast, but the mammoth tank charged on, its great

A ray struck the ground like a lightning bolt

treads jerking it through and over the pock-like holes created by the ray weapons of the attacking ships.

So absorbed was Dirk in the desperate race that he didn't feel Jan's tug on his arm until it was repeated a second time.

"Look," Jan cried. He was pointing to the section of the wall that had been demolished by the grenade. The robots were almost through the barricade that had been formed by the collapsed archway. In a matter of seconds they would be spilling out on them. Dirk saw this in a desperate glance. He jerked the slim rod weapon from his belt and waited grimly for the first of scale-covered robots to appear.

Lee's scream jerked him about.

Wheeling, Dirk saw that one of the mighty flaring-finned space ships had scored a direct hit on the tank in which Morma-Ri was riding. The long stabbing bolt of white hot energy had speared the front of the tank, melting its metal shell as if it were butter.

Lee covered her face with her hands and turned blindly to him, sobbing.

Dirk felt a sick, helpless feeling flooding over him. For Morma-Ri to sacrifice himself was one thing, but to throw his life away futilely, uselessly, accomplishing nothing, that was infinitely worse.

He tossed a look over his shoulder and saw that the first robots were emerging from the debris and wreckage of the wall. Jan was waiting for them, his slim weapon spraying the silent rays of death across their path.

DIRK risked one more glance down the sloping plateau and hope flamed in him again. For the mangled, blistered tank was still moving, gathering speed with a thrilling surge of power. Miraculously, Dirk realized, the blast had not killed Morma-Ri nor destroyed the vital mechanism of the tank. Ships were flashing down at it, stabbing at it with vicious bursts, but it roared on, bucking and lurching, gathering momentum like an avalanche.

It seemed to know a charmed path between the devastating bolts of searing light-heat that flashed from the snouts of the desperately attacking ships.

It was only yards from its objective, when Jan bellowed hoarsely in his ear.

"Turn—"

The rest of the words were drowned out in the drumming rush of feet that sounded behind him. Wheeling, Dirk had only time to throw an arm about Lee before the charging horde of robots swept over them, crushing them to the ground with sheer irresistible weight.

Jan was down too, the silver weapon knocked from his hand.

It was the end.

Dirk struggled desperately against the robot creatures swarming over him, but he knew the fight was hopeless. It was only an instinct that made him lash out again and again at the green robots.

Then through the confusion of sound beating against him, a vast muffled roar swelled in his ears, driving all other sounds away like chips before a wave. The ground beneath him trembled mightily and from the very skies above terrific electrical detonations churned the atmosphere into a maelstrom of furious turbulence.

Stunned by the magnitude of the incredible explosion Dirk crouched helplessly, his arm still about Lee's waist, too dazed to move. There was a heavy weight pressing limply on his back, and when he moved slightly it rolled off and crashed lifelessly to the ground beside him.

It was a robot. Dazedly, Dirk raised himself on one elbow and glanced around. Strewn about him were robots, dozens and dozens of motionless robots, sprawled in twisted, grotesque heaps.

Glancing down to the plateau Dirk saw a huge cavernous hole, where once had been the powerhouse which supplied the robots of Mars their synthetic life. There was no evidence of the tank, but the shattered remains of hundreds of crashed space ships were visible on the broad expanse.

After the mighty cataclysm of sound a silence, hushed and oppressive, settled on them. Dirk helped Lee to her feet, the scuffling of their shoes sounding strangely loud in their ears.

"He did it," he said softly. "He gave his life that we might have a chance to live."

"Oh, Dirk!" Lee sobbed.

"No time for tears, yet," he said gently. "We still have a job to do. A damn big job."

WHEN Jan was on his feet Dirk led them cautiously through the passage way that the robots had blasted through the wall. There was still Thogar, the huge-headed Martian, to deal

with. Dirk had not seen any other Martians in evidence, but it was certainly probably that they would meet them soon. With the destruction of their robot servants they would have to fight themselves.

In the museum room, lined with Earth weapons a century and a half old, Dirk paused, studying the armaments intently. His eye ranged from wall to wall, case to case, mentally discarding weapons unsuitable for attack against Thogar and any of bis type they might meet. But it was on a slightly raised dais, in the most prominent section of the room, that he saw an object that brougbt an incredulous exclamation to his lips.

For an unbelieving instant he stared at it. It was impossible for this thing to be here. It should be a hundred fathoms below the surface of the Atlantic ocean.

"Jan! Lee!" he cried excitedly. "Come here."

With fingers that trembled he reached for the precious object.

"Stop!"

The command was not spoken. It was a thought, branding itself on his brain, chilling his blood with a sudden terror.

Slowly he turned.

Thogar was standing in tbe doorway, his tall, thin body hunched under the weight of his immense head. The huge lidless eyes in that grotesque head flamed like twin coals as they moved over the three frozen human beings.

A heavy, oppressive silence settled like a pall over the room. Almost automatically Dirk found his hand slipping slowly to the slender weapon at his belt.

"Stop!" Thogar's imperative thought arrested the furtive gesture. You fool! That weapon would not avail against me. It is designed only to destroy mechanical life."

Dirk's breath caught in his throat as Thogar's claw-like hand opened slowly, disclosing a gleaming red globe, not more than an inch in diameter. From its smouldering center deep fires flashed evilly.

"This," Thogar continued ominously, "*was* designed to destroy cellular life. You stupid creatures have destroyed

A gleaming globe was in Thogar's claw-like hand

the robots which Mars was centuries in developing. But what was accomplished once, I can accomplish again. I, the last living member of my race, will perpetuate the memory and glory of Mars through another mechanical civilization of robots. Nothing will stop me, nothing can stop me. Centuries ago Mars knew that it was becoming a sterile race. That is the penalty for acbieving too high a degree of development. Our exodus to earth was an attempt to discover if new environments would increase the productivity of the race. That failed, but I will not fail in *my* attempt. I have another theory to once again populate the earth with Martians. For that I will need a little cooperation, with the female Earthling."

LEE gasped, her skin whitening.

Dirk felt a sick, horrified revulsion sweep over him. That this bide-

ous, unclean creature should use Lee . . .

"You'll have to kill me first," he raged desperately.

"Precisely," Thogar seemed amused. "That is just what I intend to do."

He lifted his palm, focusing his eyes on the gleaming red sphere. It began to glow violently, radiating a stream of colors that clashed and danced madly against one another.

Suddenly, something distracted the Martian's attention. His concentration on the sphere wavered. With surprising speed be leaped backward—as a human hody launched at him from the doorway.

Jan gasped in surprise, hut Dirk spun and lunged for the dais on which a small, leaden casket rested. This was the heaven-sent opportunity he had prayed for. Tremhlingly, his fingers tore open the lid of the casket—the casket which contained the instrument that had beaten a dictator's forces many decades ago. The Death Ray!

Dirk wasted no time wondering how it had gotten here. That didn't matter. Its harge could have hroken loose from its mooring on that fateful day when the forces from Saturn and Mars attacked Earth.

It had obviously been discovered by the Martians and placed here in this museum of earth armaments, an insignificant weapon compared to the death-dealing weapons perfected by the invaders from Mars.

The Death Ray was a cumhersome machine, with a round metal hase from which a thin tapering tuhe emerged. Glistening coils surrounded the inner mechanism, giving it a Medusa's head appearance.

Dirk jerked it from its casket and wheeled to face Thogar, the Martian. The huge headed creature was turning slowly from a limp hody on the floor, holding the glowing sphere hefore him. From the evilly smouldering crimson ball a radiation flashed out toward Dirk.

Dropping to the floor Dirk aimed the Death Ray at Thogar's immense head and pulled the trigger.

THE Death Ray was fatal to cellular life of any species. Its powerful disintegrating properties possessed the power to shatter the fundamentals of life itself.

For a terrible instant Dirk feared that it had failed. Thogar stood the force of the ray without hlanching, his monstrous head held erect, almost pridefully.

Then, while his eyes flashed with a sudden violent hate, his legs huckled and he fell slowly forward. The light in his protuberant, lidless eyes was maniacal. In their fanatic gleam could he seen not only the death of a creature, hut the death of a race and a way of life.

When his frail hody struck the floor, life had left it forever.

With Jan and Lee at his side, Dirk strode across the floor to the limply sprawled hody that lay next to Thogar's.

"It is Karl," Jan said simply.

Dirk knelt beside the youth and Lee cradled his hlond head in her arms. He was dying, but a spark of light was in his eyes as he looked up at Dirk and Jan.

"There are others helow," he said painfully. "I came up when the guards —" He coughed weakly, unable to finish the sentence.

"We know," Dirk said.

"D—did I do right?" Karl asked feebly.

Dirk nodded and Jan gripped his hand. Both men were thinking the same thoughts. Karl had heen afraid at one time, but in the moment of need,

his heroic action offered one more shining example of the spirit of Man. He had sacrificed himself, taken the death that Thogar had been ready to unleash, to save them.

When Dirk looked again at Karl, the youth's face was peaceful in death.

Dirk slipped his arm around Lee's shoulders and his hand gripped Jan's arm tightly. There was much for them to do. The enemies from space had been vanquished and the long unending struggle to make the world a better place in which to live must begin again.

It was a monumental task but with Lee in his arms and Jan at his side, it did not seem impossible.

THE END

MRS. LATRODECTUS MACTANS

(A Widow You Won't Want To Marry!)

By ROBERT CALFORD

THIS certain "lady" is America's most poisonous and deadly spider—you know her as the Black Widow.

Latrodectus mactans, the scientific name for the Black Widow, is found in every single state in the U. S., but is more prolific throughout the South and Southwest, especially southern California, since she is so fond of the warmer climates.

The female spider is marked with a bright crimson hour-glass on her abdomen—the male spider's hour-glass is dirty white or yellow Mr. Black Widow is a quiet, unobtrusive fellow, seeking solitude and peace and a really very much hen-pecked husband. Mrs Black Widow pursues the Mr. only at the mating season, then having no further use for him she as often as not consumes him.

Each female spider spins from one to seven cocoons a season and each cocoon contains between 200 and 300 eggs. These spiders have been known to have regular breeding nests, where the female Latrodectae spin their webs close together in a favorable spot. Thousands of baby spiders, recently hatched from eggs, can be found on these breeding grounds. The egg-laying seasons are April, May, June and July.

The Black Widow feeds on flies, grasshoppers, crickets, and other small insects. With incredible speed she spins her silken web tightly around her victim, binding it until it is completely helpless and then her needle-sharp fangs inject their deadly venom. The unfortunate insect gasps for breath and then becomes completely paralyzed. From the time a fly is bitten by the spider until the time it ceases to move entail about 40 seconds.

The tiny, white poison gland that lies along each side of the Black Widow's thorax and head secretes an exceptionally potent neurotoxic venom, which is considered more powerful in ratio to that of any of the world's most deadly reptile poisons.

This violent poison affects man much the same as it does the insects. The sting of the bite is sharp and painful, although some persons bitten have reported no pain at first The bite then leads to general weakness and numbness, excessive perspiration, muscle pain, weak pulse, high blood pressure, labored breathing and paralysis of the lower extremities. The Latrodectus poison attacks the lymphatic glands and from there can spread to the entire nervous system. If complete paralysis of the respiratory system is effected, as is often the case, death results.

To combat the spider venom, anti-toxin serums made from the blood of rats which have been immunized by repeated injections of small doses of Black Widow poison are injected into the blood stream of the bitten person. Two drops of this serum is said to counteract eight times as much poison. Other successful methods are injections of calcium glucinate or magnesium sulfate.

These spiders were called by the Indians "pokomoo." And, although they are not new, their numbers are ever increasing.

There are certain wasps, one the blue mud dauber, that lay their eggs in the cocoons of the Black Widow. The larvae that hatch out are said to devour the baby spiders. If a sufficient amount of these wasps could be raised and released in spider-infested territories, it would, without doubt, do a great deal to keep the Latrodectae under control.

THEY FORGOT TO 'Remember Pearl Harbor'

by P. F. Costello

Even o court mortial ond dishonoroble dischorge couldn't moke Ward Blackson forget Pearl Horbor!

THE large, well appointed conference room was already filled when Ward Blackson arrived. Smoke curled in lazy layers over the gleaming, durametal table, around which an even dozen men lounged comfortably, enjoying good cigars.

Several of the men wore uniforms, and the only girl present wore a severely tailored military tunic, with the insignia of the Reestablishment Corps stitched to the right sleeve.

This girl stood up as Ward Blackson entered the room. She was tall and slender, with blue eyes and ash blonde hair. Her cheeks were slightly flushed as she moved to his side.

"Please, Ward," she whispered, "don't do it. Everyone is saying—"

Ward Blackson looked down at her and there was misery in his young face.

"I'm sorry, Ann," he said through stiff lips.

Then he stepped by her and seated himself at the long conference table. Ann returned to her chair in silence.

There was a nervous stir at the table

Blackson trained the gun on the screen and a lance of flame leaped out at it

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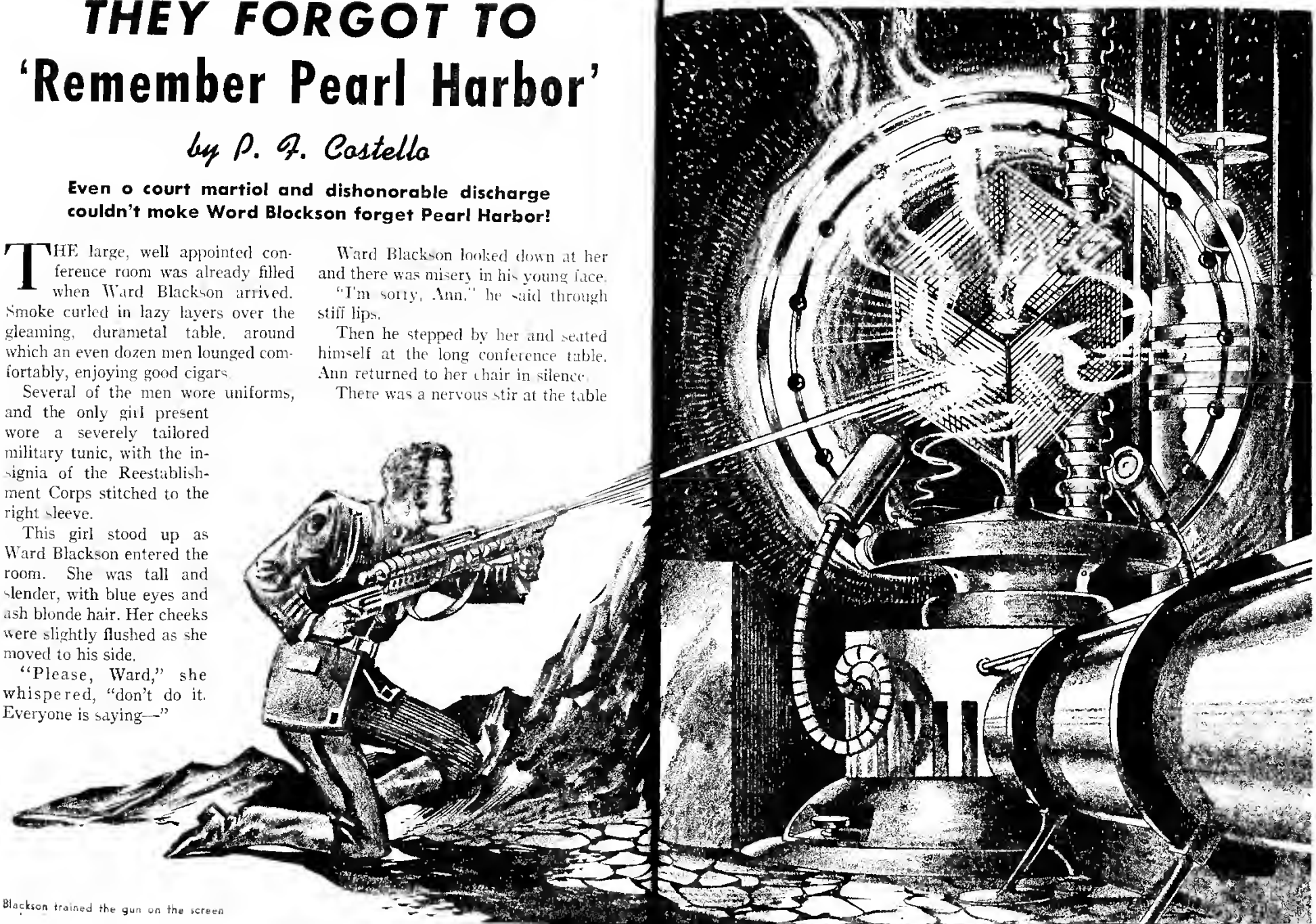

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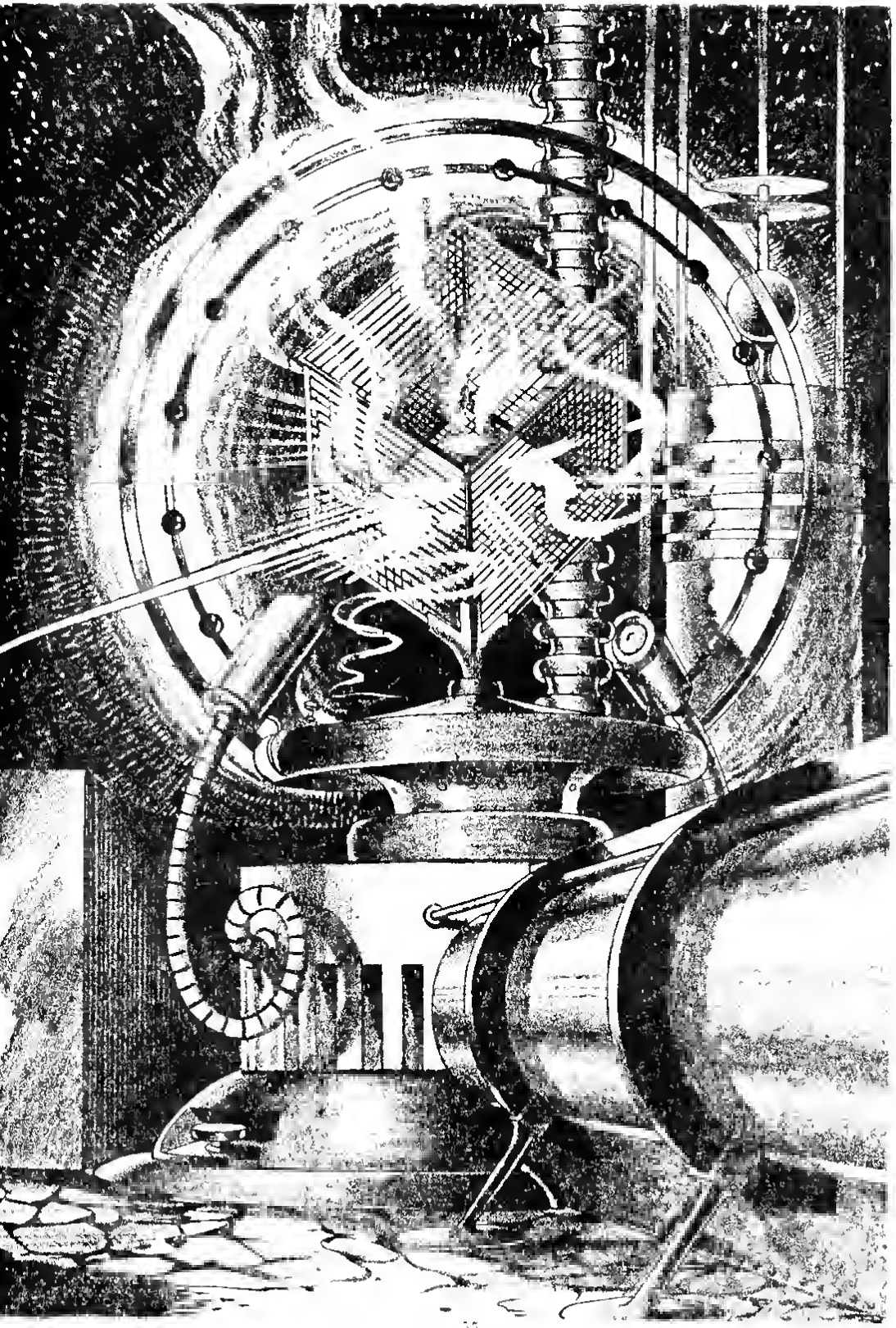

then, as several of the men cleared their throats and shuffled papers awkwardly. For a full minute nothing was said, but finally the uncomfortable silence was broken by a good-humored chuckle.

Glancing down the table, Ward saw that it was Commander Reynolds, Vice-Admiral of the United Space Navy, who had laughed. The commander was a large, heavy set man with a red, beaming face and small twinkling blue eyes, almost lost in thick rolls of fat. Wheezing slightly, he rose to his feet.

"I realize that this is a serious occasion," he said, in his booming voice, "but still I can't help but smile when I look down at Ward Blackson. Why, only yesterday it seems, I was bouncing him on my knee and playing with him on the floor of my office. Now, here he is, grimmer than death, ready to raise the very devil with me for being a befuddled, thoughtless old fool. Isn't there sometbing funny in that?"

A lean, black-haired, immaculately-uniformed officer seated directly opposite Ward glanced briefly at Commander Reynolds, then looked down at the papers in front of him.

"I see nothing funny in wbat amounts practically to insubordination," he said, in a cold bitter voice.

"Now, now, Major Slade," Commander Reynolds said placatingly, "this, after all, is an informal committee. Since Lieutenant Blackson has asked for an opportunity to express his opinions, and we, his superior officers, have granted him that wish, it is only right that we treat him with a certain respect. I feel sure that we all know what Lieutenant Blackson is going to tell us. His opinions on the subject this committee is discussing are practically a family tradition. An heirloom, you migbt say, handed down to him from his father and grandfather. We owe those opinions our attention."

Major Slade looked arrogantly at Ward and the full impact of his dislike was in the glance.

"Allow me to apologize," he said sarcastically. "Please proceed, Lieutenant Blackson, to amaze and enlighten us with the profound wisdom you have acquired in your six months of military experience. I, for one, will be delighted to listen."

Tiny muscles bunched along Ward's clean jaw line and he clenched his hands to keep them from trembling as he rose slowly to his feet.

HIS eyes ranged over the circle of faces at the table. They were all watching bim, some with amused tolerance, some with irritation which they made no pretense at concealing.

The blonde girl dropped her eyes, but not before he saw clearly the contempt mirrored in tbeir depths.

He fought his stubborn temper and managed to control it. Anger gained nothing, he forced himself to remember.

When he spoke bis voice was quiet, but there was a burning sincerity, an unmistakable emphasis to his words that commanded the reluctant attention of almost everyone at the conference table.

"In the year 1941, almost a hundred years ago, the United States of America entered a war that eventually brought an end to tyranny and dictatorship throughout the world."

Ward paused for an instant and noticed that Commander Reynolds, hands folded over his protruding stomach, was nodding sleepily. Major Slade leaned back in his chair and yawned elaborately. His mocking glance brought a flush of color to Ward's cheeks.

"Is the history lesson over?" the Major asked ironically.

Ward placed his fists on the table

and leaned forward, his square young jaw savagely outthrust.

"The history lesson has been forgotten," he said bitterly. "This committee has apparently forgotten that it took the United States and her Allies almost forty terrible years to defeat the Axis powers. Until 1980 the entire world was plunged into the misery and brutality of war—war brought on by the insatiable lust of the mad dogs of Europe and Asia. That fact seems to be forgotten by everyone today, particularly the members of this committee, whose job it is not to forget it."

Major Slade rose to his feet angrily. His thin, arrogant face was white with controlled rage.

"The members of this committee are capable of determining their jobs without your insulting reminders, Lieutenant Blackson."

He turned stiffly to Commander Reynolds, who was blinking in befuddled surprise at the scene.

"I move that the hearings on the issue before the committee be officially closed and Lieutenant Blackson be officially rebuked for his presumptious attitude and remarks."

Commander Reynolds coughed noisily, peered up at the major.

"Let us all," he said drily, "make an attempt to control our emotions."

He turned blandly to Ward.

"Are you through?" he asked.

"Not quite," Ward said grimly. "In fact, I haven't started."

"Then, by all means, start," the commander said peevishly.

"Thank you," Ward said.

"ONE minute, please," a tall, white-haired man, who had been sitting next to the girl, Ann, held up a hand for attention. When Ward turned to him, he rose slowly to his feet.

Ward recognized him as Senator Evans, one of the most sincere idealists in the World Council. A man of unimpeachable integrity, incorruptible honesty and genuine kindliness, he believed seriously in Utopia for all. Ann idolized him.

"Please accept my apologies for interrupting," he said in a surprisingly mild voice, "but since everything has been so informal, I hope no one will mind my intrusion."

He turned to face Ward directly.

"Lieutenant Blackson, you have reminded us of the Great War that ended in 1980. That, I might remind you, was sixty years ago. Your grandfather and I attended the diplomatic meetings that followed that war, and we were both present at the World Court when sentence was passed on the leaders of Axis nations. Your grandfather pleaded for their immediate execution. I, I am proud to say, pleaded for mercy."

"They *should* have been executed!" Ward said.

Senator Evans drew a slow breath.

"My son," he said softly, "as intelligent, civilized, humane creatures, we *couldn't* do that. Our first task was to erase from our own hearts all of the prejudice and bitterness and hatred we had accumulated during those horrible war years."

"Very noble," Ward said bitterly, "but how can you permanently stop dictatorships if you are squeamish about punishing those responsible for dictatorships?"

"There are punishments besides death," Senator Evans said mildly.

"None as permanent," Ward said.

Ann leaned forward tensely, her blue eyes flashing.

"Ward, I'm ashamed of you. You sound like a barbarian."

Ward looked at her helplessly, knowing that the gap between them was widening with his every utterance.

Senator Evans cleared his throat.

"We are straying from the point," he said. "The war has long been history. Punishment of a humane sort has been meted out to those adjudged guilty by the World Court. Measures to enforce that punishment have been enacted for the last half-century. That is all part of the past which we are all so happy to forget. Now we are meeting here to decide on whether certain of these measures might be abolished. It is, I am almost certain, the unanimous opinion of this investigating committee that certain measures might be discontinued. Still, we are willing to listen to any reasonable arguments *against* their being abolished. In all fairness, Lieutenant Blackson, I must point out that you have as yet advanced no arguments."

"Senator Evans is right," Commander Reynolds said ponderously. "My boy, if you have nothing to add to what you've already said, I feel sure we will be able to excuse you for the remainder of the hearing."

WARD felt a desperate feeling of helplessness, of incompetence, of muteness sweeping over him. The burning convictions that were almost a part of his soul, the certainty that his opinions were right, were just, seemed locked in his breast, incommunicable to anyone but his own inner self.

He believed that the power-crazed dictators responsible for the tremendous and terrible war of the last century should have paid for their crimes with their lives. Of course some of the mad dogs had died before the war was over, but they had passed their swords to brutal and eager hands that soon became as bloody as their own had been. These men should have paid the extreme penalty for their ruthless violation of the laws of God and Man. Instead they had been exiled to a comfortable planetoid and there, were allowed to live out their lives in comfortable complacence.

In the last days of the wars—as science had worked feverishly to produce new and deadlier weapons—the miracle of space travel had been accomplished. The humanitarian element who had pleaded for the lives of the military and diplomatic clique of the Axis nations had proposed exile into the void as an alternative to death.

A war-weary world, sick of bloodshed and brutality, had agreed. The convicted military leaders of the Axis, some eight thousand in number, had been banished from Earth. Space patrol ships made monthly visits to the planetoid, which was located half-way between Mars and Earth, to see that no armaments were being built, that no troops were being trained and that no attempts were being made to construct spacecraft.

However, as the years passed, the patrol ships had relaxed their vigilance. Inspection trips were put on an annual, instead of a monthly schedule. Then the patrols were reduced to two small observation ships which made a perfunctory stop at the planetoid every two or three years. Finally, in response to a public demand for economy, it had been proposed that the patrols be abolished altogether.

THESE thoughts flashed swiftly through Ward's mind as he faced the members of the committee that had been called to discuss the proposal. The members who, he realized with sickening finality, would vote unanimously in favor of the proposal.

His eyes swung about the table desperately.

"Instead of discontinuing the inspections patrols," he said angrily, "we

should go back to the monthly or even weekly basis. And we sbould send fighting ships, not observations."

Major Slade smiled thinly.

"I'm afraid you're becoming a bit hysterical," his tone was mockingly solicitous. "After all, my young friend, what do we have to fear from the handful of humanity on Exile Planetoid? They have no arms, no metals with which to make them and no means of crossing the void to attack us."

"People said that about the oceans," Ward said. "Until a way of crossing them was discovered. Even then some people continued to believe it."

"The situation is hardly parallel," Slade said. "Your obsession in regard to Exile Planetoid is almost dangerous, Lieutenant Blackson. Your complex seems to spring purely from a desire to persecute these poor peoples."

"Another thing," Commander Reynolds said testily, "these patrols are a damned nuisance and I ought to know. Throws off fleet maneuvers for two months to send a fighting force halfway across the universe. They're expensive too. Cuts into my appropriation like the very devil."

"May I interrupt again?" Senator Evans smiled. "Most important, we only serve to keep alive the spirit of hatred and prejudice by sending fighting ships on monthly patrols to Exile Planetoid. It indicates that we do not trust these people, that we are ready on an instant's notice to blast them out of the universe. We must conquer their distrust of us, let them realize that we not only talk, but practice tolerance and good will. Then the day may soon come when we can welcome our exiled fellow human beings back to their rightful home on Earth."

"So they can blow it to pieces again?" Ward demanded.

"Ward!" Ann spoke pleadingly. "Must you always nourish and cherish your bitterness for those poor wretches? They have suffered and their children have suffered for their sins. Isn't that enough? We have work enough to do here without spending time and money tormenting tbem further. There are still homes and hospitals to rebuild, museums to erect, fields to cultivate, all kinds of jobs to be done on Earth. Why can't we work out our destiny, and leave them work out theirs?"

"THAT has been tried," Ward said stubbornly, "and it has never worked. The persons on Exile Planetoid are no different than their ancestors who plunged the world into madness a hundred years ago. They are, or will be, motivated by the same mad craving for power, the same ruthless violation of the God-given rights of others. They *must* be watched. We have been lenient in allowing them to live and propagate. But let us not be stupid and allow them again to strike treacherously at our backs."

"Your imagination is astounding," Major Slade said icily. "On Exile Planetoid are a mere handful of people, without arms, without equipment, in short, without anything, and you have them on the point of attacking the impregnable defenses of Earth. Furthermore, Lieutenant, the case record of Exile Planetoid is a testament to the peaceable nature of the exiles. Never has there been a case of revolt or antagonism against our patrol ships or their crews. In short the conduct of the entire pitiful colony has been exemplary."

"Then our job is to keep it that way," Ward said explosively. "If the Japs and the Germans on Exile Planetoid are being good, it's only because it's the only thing they can do."

Commander Reynolds cleared his throat importantly and shuffled the

papers before him.

"Lieutenant Blackson," he said, "we aren't getting very far, are we? This committee has listened to your remarks carefully. I migbt remind you that your being granted permission to testify before this hearing was highly irregular. It was in deference to your greatly respected grandfather and father that we decided to let down the bars, so to speak, and listen to you. Now you have had your say and I trust you are appreciative. If you have nothing more to add, will you excuse us while we go on with the regular business of the committee?"

Ward felt a heavy, hopeless pain lodge in his breast. He was being told to get out, but that wasn't important. Important, was the fact tbat he had failed miserably.

"The patrols to Exile Planetoid will be discontinued," he said almost to himself; his voice was dully bitter. He was stating a fact. A stupid, impossible, criminally careless fact. But still a fact.

"That will be for the committee to decide," Commander Reynolds said.

Major Slade's lean face twisted mockingly.

"Not for young men with fanciful imaginations," he added ironically.

Ward looked at him for an instant, his fists knotting savagely. Then, with an effort, he throttled his black rage and strode from the room.

CHAPTER II

A Strange Attack

WARD BLACKSON arrived at his apartment in the third level of upper metropolitan New York some two bours after he stalked from the committee room.

He had spent the time walking blindly through the pedestrian layers of the city, his mind a seething cauldron of bitter hopelessness. Memories taunted and burned him. Memories of Ann Lear's deep blue eyes and the contempt they beld for him. Memories of Major Slade's caustic mockery, Commander Reynolds' patronizing smugness, blindness . . .

Memories of Ann again. Walking together on West Point's campus the day he received his commission as a lieutenant in the Army Space Fleet. Plans. Plans for two people, very young, very much in love. All smashed now.

What else could he have done? That question bounced ceaselessly in his weary head. His convictions, his honor, the things he lived for, wouldn't allow him to stand passively by while a criminally stupid committee planned to unleash the mad dogs on Exile Planetoid. Even though his action brought him into sharp conflict with his commanding officers, even though tbey alienated the affections of the girl he loved, even though it was a futile, helpless gesture, still it was a gesture he had to make.

A bitter smile touched his lips as he opened the door of bis dark apartment. Well, he had made the gesture. Now where was he?

He was turning to flick the light switch when he heard the stealthy rustle of motion behind him. Almost instantly he started to wheel, but something blunt crashed into the back of his head, exploding a searing flasb of pain before his eyes.

He staggered and fell heavily to the floor. Dimly he felt rough hands turn him over. Something wet and bitter splashed in his face and doused his tunic. An instant later be beard swift footsteps, then a door slammed.

Ward fought the darkness that was

overwhelming him, but it was a losing figbt. His head lolled helplessly as a smothering oblivion blanketed his senses . . .

AN eternity later, a voice, a familiar voice, penetrated the black fog through which he was falling.

"Ward! Get up! Try and stand on your feet."

Ward opened his eyes, tried desperately to bring the spinning room into focus. His head ached intolerahly and there was the hitter stencb of alcohol in his nostrils.

Ann was kneeling beside him, tugging at his shoulders with both hands.

"Stand up, Ward," she said again. Her voice was a blend of humiliation and disgust. "You're a disgraceful sight lying there."

She looked up helplessly to another figure who stood beside Ward's inert form.

"Please help me, Major Slade," she said tearfully, "I can't do a thing with him."

Ward focused his eyes on Major Slade's thin expressionless face and he tried to raise himself on one elbow. Everything was horribly confused. The last he remembered was stepping into his room and being slugged from behind. Why Ann and Major Slade were bere he had no idea.

"I'm all right," he said thickly.

"You're disgracefully drunk," Ann said bitterly. "Take his otber arm, Major."

Ward rubbed his aching head, dazedly.

"Drunk?" he repeated. "Where'd you get that idea?"

A wave of nausea swept over him then and he sank back to the floor, his senses reeling. He felt himself being dragged across the floor and lifted into a chair. Then a cold cloth was on his forehead and he opened his eyes again.

Major Slade was looking down at him with well-bred disgust stamped on his thin, intelligent features.

Glancing down Ward saw that his tunic had heen soaked with some cheap alcoholic intoxicant. The stench of it was strong in the room.

Ann changed the damp cold cloth on his head.

Ward relaxed under the cool soothing touch of her hands. He realized that she tbought he had passed out from too much strong drink. And from Major Slade's expression, he obviously believed it too.

"I was hit over the head," he said wearily. "Someone was waiting for me when I returned here. I haven't been drinking."

Major Slade pursed his flat lips thoughtfully.

"I think," he said, choosing his words with deliberate care, "that we had better leave it to the Martial Court to decide that question."

THE captain presiding as judge of the Martial Court was obviously reluctant to pass sentence.

"Lieutenant Blackson," he said, removing bis glasses and leaning back in his chair, "it is my duty to pronounce sentence on you in accord with the findings of this court. Nevertheless, I hesitate to do so."

Ward stood before the long mahogany table, facing the six memhers of the Martial Court. His face was pale and set in hard, hitter lines that had appeared there in the past week. At tbe other end of the table sat Ann Lear and Major Slade. Ann had not looked at him once during the trial. She had given her testimony in a slow, halting voice, never lifting her eyes from the tightly crumpled handkerchief in her hands.

The presiding officer drummed his fingers nervously on the smooth surface of the tahle.

"We bave examined the facts in this case with considerable thoroughness," he said. "Your illustrious parentage and your own splendid record to date have been two factors taken into consideration. However, the ugly fact remains, supported by the unimpeachahle testimony of Major Slade and Miss Lear, that you have been grossly guilty of unpardonable conduct. Miss Lear gave ber testimony under considerable duress, I am afraid. But the fact that she has known you for many years, and has a natural sympathy for you, tends to make her evidence that much more conclusive."

The presiding officer glanced again at the sheet of paper lying before him on the table. Then he ran his hand irritably through bis graying bair.

"Lieutenant Blackson," be said, "everyone can make a slip now and then. Youthful escapades are not altogetber unusual among the officers of the fleet. Sometimes we have overlooked these peccadilloes, chalking them up to the exuberance of youth. Speaking frankly, I can say that we would be happy to take a similar view of your case, if you would admit your lapse and assure us that it would not happen again. But tbis story of yours ahout an attack hy ao unseen assailant strikes us as being an unmanly attempt to escape the consequences of your conduct. You have said you have no known enemies. Robbery was obviously not the motive of the attack, for nothing was taken from your person or room. Therefore we are forced to assume that the attack occurred only in your imagination. If you would admit this we might reconsider your case."

He paused and looked hopefully at Ward's tightly set jaw. Tben he sbook his head and looked back to the paper on the table.

"In that event," he said slowly, "you force me to pronounce verdict. I bave no other alternative."

HE paused again for an imperceptible instant, then moistened his lips and continued.

"In the opinion of this court," he read from the paper before him, "the accused, Lieutenant Blackson, bas been found guilty of conduct unbecoming an officer of the United Nations Forces. The verdict of this court therefore, is that the accused shall be relieved of his commission as lieutenant in the United Space Forces, this action to take effect immediately."

There was a complete silence in the room as the verdict was read.

No expression touched Ward's face, but his eyes were as bleak as ice as he listened to the words that swept away everything in his life that was important to him.

"Relieved of his commission . . ."

The echo of those words were branded into his soul for all time. Broken out of the service for disgraceful conduct. A dishonorable discharge. A black mark against a name that had been carried by some of the proudest heroes of Earth.

He had expected it. It was the inevitable conclusion to the classic frame-up against him. Still, his hlood was like ice water in hls veins as the horrible import of the verdict became a reality.

Face wooden, muscles straining, he stood in silence while an officer cut the insignia bars from his tunic jacket. Each snip of the sbears cut away something of bimself. And when it was over there was nothing left of Ward Blackson. A stranger stood in his place. A bitter, cold, steel-hard strang-

er, who swept the room with one contemptuous glance, then strode in silence toward the door.

A cry sounded hehind, but he walked on, more a machine than a man.

"Ward!" the cry sounded again and broke off in a choking sob.

Light, swift footsteps were beside him then, and Ann's hand was clutching his arm.

"Ward, listen to me," she said imploringly.

He stopped and stared straight ahead, not looking at her.

"Was there something you wanted?" he asked.

"Please look at me," she whispered.

HE turned slowly and saw the pain in her eyes and tbe dampness shining on her cheeks.

"I'm looking at you," he said.

"I had to do it, Ward," she said miserably. "I would rather have died than testify against you, but it was my duty. Don't you understand? It was my duty."

He shrugged. "So? What difference does it make?"

"It makes a difference to me, Ward."

Ward felt the anger, the bitterness, the disgust that was in him, boiling to the surface like scum on water.

"So it makes a difference to you," he said softly. "Isn't that wonderful! That makes everything all right, doesn't it? Your idea of duty is a nice inflexible God that you burn incense to and who makes everybody happy. Did you ever consider that trust is an important part of duty?"

He looked at her for a minute then shook his head.

"No, you wouldn't," he said. "That would knock your inflexible little God for a row of loops and you wouldn't like that. Never mind. Maybe you'll be happier not trusting people."

He took her hand from bis arm, bowed politely and walked away.

As be descended the mile-height of the war administration building in the swiftly dropping elatuhe car, his mind was churning savagely and blindly. He wanted to strike back, to hurt the people who had hurt him, but the one part of his brain that remained cold and thoughtful insisted inevitably that revenge would be an empty accomplishment.

When he stepped onto the gleaming pedestrian level, a half-mile above the ground, the first sight that met his eyes was a huge tubular news sign which flashed the latest bulletins to the city's population. The dispatch which had just flicked on told of the abolition by Council vote, of the patrols to Exile Planetoid.

He stared at the newsflash bitterly for a long moment.

"That calls for a drink," he said ironically.

CHAPTER III

Destination—Exile Planetoid!

FOR a week Ward Blackson stayed drunk. Unkempt, unshaven, he slumped on a couch in his apartment, a glass inevitably in one unsteady hand.

As better men than he had discovered before, there was no permanent solace in alcohol. He was trying to forget, but he found it impossible.

One morning he awoke, staggered across the room and poured himself a drink. Half-way to his lips his hand paused. For a long interval he stared at the glass, then slowly he tipped it and splashed the contents onto the floor.

An hour later he had shaved, showered and changed clothes. Only then did he sit down and hegin thinking.

He was on a new course, one that might eventually prove as futile as the path he was abandoning, but he was determined to make the attempt. He was going to vindicate the name of Ward Blackson.

The nub of his problem, the solution to all the maddening questions that presented themselves, lay in the attack that had been made on him the day of the Committee hearing in regard to Exile Planetoid. If he could find some clue as to who had slugged him from behind that afternoon in the apartment . . .

He stood up and restlessly paced tbe length of the room, bis forehead lined with anxious thought.

Was it possible that there was some connection between that committee meeting and what had bappened to him later?

It wasn't logical . . .

He paced for an hour, his mind worrying the problem. If only he could remember something about his assailant. But all he could recall was that first warning sound, then tbe oblivion that followed the slugging blow from behind.

Was it mere coincidence that Major Slade and Ann had walked in while he was lying on the floor, saturated with cheap rum?

His thoughts inevitably returned to the moment of the attack. He had been standing with his back turned, fumbling for the ligbt switcb. Without warning, without scruple, the smashing, cowardly blow had been struck.

Who would be capable of an attack like that?

There was only one answer, and it was so illogical, so preposterous, that be dismissed it with an impatient sbrug.

But his mind returned to it, again and again.

For another hour be tramped the floor, a slow, burning excitement leaping to flame in bis veins. The conviction came to him slowly, but it came with force. There was only one thing to do, only one course of action left to him. It was foolhardy, impossibly perilous, but he wasted no time weighing chances or considering danger.

Having reached a decision he acted. It took him only a few minutes to make arrangements. Then he strode from the apartment. He did not intend coming back . . .

IT was dusk when he reached the immense, sprawling rocket field on the outskirts of Metropolitan New York. Here the Space Navy docked its fighting ships and great cruising bombers. Ward knew every inch of the field, for he had received his cadet training there for four summers.

Streamers of phosphorescent sparks drifted from the red tubes of rocket ships streaking above him, destined for the far flung reaches of outer space.

He stood on an embarking ramp, near a long line of speedy fighters, commanding a view of the entire field. Every few seconds a ship blasted from one of the bundreds of firing tubes, visible only as a hlurred orange streak, hissing briefly as it ripped through the thin film of Eartb's atmosphere. At the opposite end of the mammoth field ships were arriving.

They came in more slowly, flying on an infinitesimally accurate electric heam that led them unerringly to the mighty mooring towers that reared upward bundreds of feet into the air.

Ward was not interested in the arriving ships. His attention was focused on the line of fighting ships that were resting in their propulsion tubes, ready for instant blasting into space.

His plan depended solely on whether the news of his discharge had reached

the mechanics who kept these emergency ships in repair. If it had, he would he forced to ahandon his plan and try something else.

He waited on the ramp, keeping in the shadow of a huttressed pillar, until he saw a memher of the maintenance crew swinging along toward him. When the man passed him and headed for the line of propulsion tuhes, Ward hreathed a sigh of relief.

He knew the man and that might make his joh easier.

A moment later he saw the mechanic's electric torch flickering over the pilot opening of the propulsion tube. With a silent prayer, he stepped from behind the pillar and strode rapidly toward the tube the mechanic was inspecting.

"Hello, Johnny," he called. "Is she all set to go?"

The mechanic looked up in surprise. His face was in the shadow of the tuhe and Ward couldn't discern his reaction.

"Why, yes she is ready to travel," the mechanic said slowly, "hut I didn't know you were going out tonight."

Ward tried to laugh easily.

"I didn't either," he said, "until about a half-hour ago. Someone made up his mind in a hig hurry."

"Yeah," the mechanic said, "somehody sure did."

WARD noticed that the man was watching him closely, and that suspicion was beginning to glint in his ohservant eyes. A hluff was the only thing that might hlunt the fellow's skepticism.

"Let's go," he said hrusquely, "I haven't got all night. I'm anxious to get hack as soon as possihle."

He stepped toward the door of the tube, but the pilot stepped quickly in front of him.

"Just a minute, Lieutenant," he said, "you know I've got to see the clearance forms on every ship that leaves this line. I'm sure everything is all right, hut I must have those papers."

"Why, sure," Ward said. He fumhled with the flap on his leather jacket until the mechanic's attention wandered to the spot. He realized that there was nothing left for him to do hut take the ship hy force. The mechanic was definitely suspicious, and would hecome more so if he attempted to hand him a cock and hull story ahout the clearance forms.

"Here they are!" he snapped.

His left fist snapped up, with the complete weight of his twisting shoulders behind it. The mechanic's jaw was a perfect target, and Ward's steaming punch connected solidly.

The mechanic staggered hack, a ludicrous expression of amazement spreading over his face. He opened his mouth to shout a warning, hut Ward's second punch to his stomach douhled him up helplessly.

"I'm sorry ahout this," Ward said grimly, "hut it seems to he necessary."

He swung again, a short chopping blow that packed all of his hard wiry muscle hehind it. The mechanic grunted as it hounced off the point of his jaw, then he slumped quietly to the ground. Ward dragged him out of the light, then hurried hack to the propulsion tuhe and dropped quickly into the pilot's seat of the space ship.

HIS eyes flicked swiftly over the instruments. Asteroid screen, communications, fuel, everything was in perfect shape.

He felt a giddy excitement rushing over him as he set the accelerator and shoved home the lever which set into action the isotope of uranium that powered the ship.

The thrill of the trackless, houndless

mystery of the void was beckoning to him. Always the magical lure of space possessed him, but now he was hurling himself into its immense gulf on his most important mission. The cards were stacked against him, but nevertheless, all of his chips were staked on this one game.

His hands were trembling as he sealed the cowl-like door of the ship. Swiveling back to the instrument, he grasped the firing lever tightly.

Ready to go!

Destination—Exile Planetoid!

The small planetoid where the descendants of the banished dictators and mad dogs of Earth were isolated was Ward's first stop. He felt fiercely certain that there, somewhere on the planetoid, was the explanation of the attack on him and his subsequent frame-up.

Why he felt so positively that the answer to the riddle was there, he, himself, was not certain.

There was, for one thing, the fact that the attack had occurred the same day he had protested so bitterly against the discontinuance of the patrols to Exile Planetoid.

That was an extremely slight bit of evidence, however, to motivate this dangerous trip. But there was one additional factor that had concretized his decision.

It was that the attack had occurred in the dark—and the blow had been struck from behind.

Slim clue, but it was enough for Ward.

With grimly set jaw, Ward slammed the firing lever into place.

A hissing, crackling detonation split the air for an instant, then settled into the faint electric hum of flowing energy.

For an instant he waited. Then with an abrupt, swift gesture he tripped the propulsion tube releases. With a thunderous roar of power the slim space craft rocketed from the tube and slashed through Earth's atmosphere. A trail of fiery red sparks glowed with weird beauty against the blackness of the night as they settled slowly to earth.

CHAPTER IV

Exile Planetoid

EXILE PLANETOID was a small, gleaming, irregularly shaped mass, twelve hours from Earth by the fastest ships. It lay almost directly between Mars and Earth. Astronomers had been unable to detect its presence because of a densely vaporous aura which clung to its atmosphere and rendered it photographically invisible.

It was only when space travel became a reality that its existence was realized. When its orbit had been charted and the mineral deposits determined by spectrum analysis, exploratory trips had been made and a mass of data accumulated.

The white vaporous gases that cloaked the planetoid had been visible on the visi-screen for several hours. Six hours before Ward Blackson had sighted his destination and he was now within an hour's distance of it.

On the visi-screen, directly ahead of his instrument panel, he watched the planetoid grow larger with each second. Beyond Exile Planetoid's comparatively infinitesimal mass, he could see the blazing red bulk of the ever-mysterious planet of Mars.

Earth space ships had never been able to reach this planet. While successful trips had been made to Uranus, Saturn, and even far-flung Jupiter, the red planet of the War God had defied the daring of pilots and the brilliance

of scientists alike.*

Ward had been piloting bis ship almost mechanically for the last few bours, and he was yawning from sbeer boredom as his eyes passed perfunctorily over the mooring instruments, then swung lazily again to tbe visi-screen.

He studied the screen for an instant, but as his eyes were slipping away from it, he saw something that brought him to his feet, every nerve tensed.

In the far corner of the visi-screen a small black oblong speck was just disappearing—in the direction of Mars.

For a tense moment Ward studied the screen anxiously but there was no further evidence of the black oblong. He sat back in the pilot's chair, his thoughts churning swiftly.

THAT black oblong could have been nothing but a space ship. It must have been an Earth ship, because there were no other ships in the void. Tbere were, however, several amazing things to consider about the appearance of that ship. First, its speed was easily twice his own, because it had pulled out of his vision almost instantly. Secondly, it was an incredibly immense ship. Nothing less than a giant cruiser would have shown on his screen at that tremendous distance.

Ward wasn't sure, but he knew of no ships of that size and speed from Earth. Possibly it was some incredibly swift behemoth that had been built in secret by Allied Intelligence. Supporting tbat theory was the fact that it had been heading directly toward Mars—in fact wben he had sighted it, the huge ship was already within the radius of Mars' electrical storms.

It was logical to assume tbat it was some new type ship built expressly to crack tbrough the storms that raged about Mars.

Ward had become so absorbed in the mystery of the huge ship that had flashed across his visi-screen, that he had forgotten the proximity of Exile Planetoid. It was looming before him now, a huge mass of vaporous white, completely blotting out the blazing planet of Mars.

Ward jammed his foot against the deceleration lever, braking the tremendous speed of his ship.

In a few seconds he was through the filmy mist and the small planetoid was suddenly revealed to him. Luckily the nose of his flashing ship was pointed almost directly at the one mooring tower that had been erected on the planetoid. Cutting the rear propulsion blasters out completely, he prepared to dock.

WHEN he climbed from his ship and descended to the ground a small cluster of inhabitants bad already gathered at the base of the tower.

From this aggregation a brown-skinned, pock-marked little man detached himself and stepped forward, bowing carefully.

"I am so pleased to welcome you," he said. He spoke with a slight lisp and pronounced the words very carefully. Dressed in the regulation gray clothes which Earth provided for the exiles, he, nevertheless, managed to stand out from the motley horde. His face was bland and pleasantly expres-

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*An unfavorable electrical condition existed about Mars. Scientists were unable to devise shields that would resist its heat, and no pilot had ever been able to approach within more than a few hundred thousand miles of the planet.

The electrical manifestations were attributed to mighty, raging space storms that, for some reason, were attracted magnetically to the atmosphere of Mars. Whatever the reason, tbe fact stood, that Mars was as alien, as mysterious, and as grimly forehoding in the days of space travel, as it had been in tbe time when rocket ships were but an impractical dream.—Ed.

sionless, but his inscrutable dark eyes were very observant, even though his gaze seemed centered continually on an objective just above Ward's left shoulder.

"I am Tojo," he said, after a slight hesitation. His eyes touched Ward's briefly, then shifted away.

Ward nodded curtly. He was on thin ice and he decided the less he said the better. The crowd that had gathered at the base of the tower was now moving away, their glances scrupulously avoiding his. Ward wondered if they received some sign from Tojo. They were a mixed and motley lot. The descendants of the Aryan Germans towered blond and sullen above the Japs. But there were a number of cross breeds in the group, short stocky men with light eyes and hair, wearing the perpetually imperturbable expression that was their heritage from their Nipponese ancestors.

When they had filed away and disappeared around a corner of a crude, but soundly constructed building, Tojo smiled inquiringly at him.

"I am yours to command," he said blandly. He hesitated, drawing a breath through his teeth with a slight hissing sound. "Pardon, if I am presumptuous, but might I inquire if there is any special reason for your very pleasant visit? Or is it, perhaps, only our good fortune that you happened by accidentally?"

Ward realized then that it was hardly likely that any news had reached this isolated planetoid since the last Earth patrol had visited here. This realization brought him a new confidence.

"It was no accident," he said bluntly. "There are certain definite reasons for my being here."

Tojo's bland face beamed.

"I am overjoyed to hear you say so. Anything I can do to assist you will be a pleasure. Now, might I suggest that you follow me to our living quarters? Your trip must have been tiring. Food and rest will refresh you."

"Thank you," Ward said drily.

With a slight, deferential bow Tojo turned and led the way toward the centrally situated group of buildings that housed the inhabitants of Exile Planetoid.

THE small city was laid out with Germanic exactness. Streets had been planned geometrically, and on each narrow, clean street an equal number of stout wooden houses had been constructed. All the meagre resources of the planetoid had been utilized to create an atmosphere of solid frugal practicality.

Ward's glance probed down each side street they passed. Except for the absence of people, everything looked peaceful and normal.

They followed the main street for perhaps a hundred yards before Tojo stopped before a dwelling, identical with the others, except that it was wider and higher.

"Our State House," he said, with a sly glint in his evasive eyes. "Here we transact the simple administrative business of our community and keep such records as we find necessary. It is quite sufficient for our purposes. Please, be so kind as to follow me."

He bowed again and stepped into the house. Ward followed him. A man with thick blond hair rose from behind a desk as they entered.

"Ha!" he said loudly. "Good day, Lieutenant. It is good to see you. Permit me to introduce myself. I am Baron von Multke."

He laughed, showing clean strong teeth.

"The title is an affectation, of course,

but it is a harmless vanity."

He laughed again and stepped around the desk, extended his right hand to Ward.

Ward shook hands, studying the man closely.

The German was taller than he, with wide, heavy shoulders and a large, well-shaped head covered with thick, closely-cropped blond hair. His eyes were cold points of blue in his hard face. Their expression did not reflect the smile on his lips.

"It is good to have you here," Baron von Multke said, pounding him on the back. "We like visitors, don't we, Tojo?"

"But of course," Tojo smiled. "It is a pleasant relief from the somewhat monotonous routine of our existence."

Ward could detect only the faintest tinge of sarcasm beneath the bland words, but it was enough to kindle his suspicions.

"Have things been so terribly monotonous?" he asked casually. He looked away from the two men as he spoke, but glanced back in time to catch the look that passed between them.

"Life for an exile is always monotonous," Tojo said silkily. "How else could it be?"

BARON VON MULTKE was chuckling again, his big shoulders shaking with the effort.

"I am so stupid," he said. "I have not even inquired why you are here, Lieutenant. I know you are a busy man and want to get on with your work, but still we stand around and talk of idle things. Enough! We are at your service, Lieutenant."

Both men, Ward noticed, seemed anxious to learn why he was there. It had been the first thing almost that Tojo had asked, and now the Baron was after the same information.

Ward smiled inwardly at the irony of the situation. When he himself didn't know definitely what he was looking for, how could these two worm the information from him?

But he could sense a peculiar tenseness in the attitudes of Tojo and the baron. That might be a natural reaction to his surprise arrival, but he had the strange impression that they were waiting for some expected development.

"That's very kind of you," he said. He realized that he had to advance some pretext for his presence, so he added, "As a matter of fact you might be able to help tremendously. Have either of you seen a very large, black space ship in the vicinity lately?"

The question had been a spur-of-the-moment inspiration. It had popped out, almost without any conscious volition on his part.

He heard something shatter against the floor and, looking down, he saw the scattered fragments of the monocle the baron had been holding loosely in his fingers. His eyes lifted slowly to the baron's face. It was strained and white.

"I said," he repeated, "have either of you seen a large black space ship in the vicinity *today?*"

"How clumsy of the baron," Tojo said mildly. "He should know better than to let something slip."

There was a peculiar emphasis on the last word that Ward did not miss. There was definite undercurrent of feeling in the room now and he had the impression that it had been given impetus by his question about the black space ship. It might have been only his fancy, but he felt he was getting closer to the meaning of all the disassociated events that had happened in the last few weeks. Excitement

hoiled through him. There must be a pattern, a definite significant meaning to the twisted skein that he had been trying to unravel. And he felt he was close to it.

A SHOUT from outside disrupted his thoughts. Tojo and the baron were looking beyond him to the door, an unveiled anticipation in their eyes.

A tramp of feet sounded and two stocky, sly-looking half breeds crowded into the room. One of them addressed the baron.

"Another ship from Earth has arrived."

Tojo flicked an inscrutable glance at Ward.

"How charming," he smiled. "Another visitor from Earth. This is indeed a fortunate day for the poor exiles."

"Good!" cried the baron. "Company to keep the young Lieutenant from being lonesome."

There was a deliberate heavy mockery in the words.

There were the sounds of commotion outside the building. Shouts and tramping feet blended into a confused, noisy bedlam.

"It is good," Tojo said blandly. "Our new guests are being escorted here with proper ceremony."

Ward felt the skin tightening at the back of his neck. He knew his own game was almost over. If the new arrivals were Space Navy officers—as was almost certain—they would instantly denounce him and brig him for his theft of space ship.

Tojo and the baron were both watching him closely, but even if they hadn't been, it was too late to make any kind of a break. For the tramping feet were directly outside now, and an instant later the door swung back and the two stocky breeds pushed into the room—followed immediately hy a slender figure wearing snugly fitting boots and breeches.

Ward's eyes widened incredulously as he recognized the new arrival as the last person in the universe he'd ever expected to see again *anywhere*—Ann Lear!

CHAPTER V

An Unexpected Development

BARON VON MULTKE and Tojo were as dumbfounded as Ward. They were obviously expecting someone besides a slim hlonde girl.

"Welcome," Tojo faltered. For once his imperturbable poise was shaken. "We are honored greatly by your presence."

Ann acknowledged his greeting with the hriefest of nods, then turned to Ward. There was a tense urgency in her manner, but underlying it was an embarrassed hesitancy as she faced him.

"Ward," she said quietly, "I know you can't he particularly happy seeing me again. I don't expect you to thank me for following you here but I had to do it. You're starting on a path that has no turnlng. If you let yourself be branded a thief to be hunted down like an interplanetary outlaw, it can only end in further disgrace and humiliation. A squadron of Earth ships is already searching for you. But it's not too late to turn back. If you return to Earth and give yourself up I'm sure the Court will overlook your theft of an Earth fighting ship. It might even be possible to have your case reconsidered. Don't you see it's the only honorable thing you can do? Won't you please, for my sake, give up this madness and return to Earth with me?"

Ward looked at her steadily, his eyes impassive.

"Your interest is very touching," he said, at last.

Tojo, the suave inscrutable Japanese, glanced interestedly from the girl to Ward. There was a pleasant expression on his face.

"Please forgive my interrupting," he purred, "but if the impetuous young Lieutenant has stolen an Earth fighting ship, it is a very serious concern of ours."

He turned and bowed slightly to the huge, blond Baron.

"Do you agree with me, Baron Von Multke?"

The German's square white teeth flashed in a smile. There was no humor in the smile, just a gloating betrayal of intense inner satisfaction.

"But certainly," he snapped harshly. "The Lieutenant is here under false pretenses. He is probably a traitor to Earth. It is our duty to hold him until the accredited officers of Earth arrive to take him into custody."

There was a tense silence in the room as he finished speaking. The only persons in the room to move were the two breeds, and they stepped quietly in front of the door and folded their arms impassively. Ward noticed this and realized its significance.

ANN looked in alarm from the hulking Von Multke to the diminutive Tojo.

"You don't understand," she said anxiously. "I came here to take Ward back with me. If he gave himself up voluntarily the charges of stealing a ship would probably be dropped. You can't hold him here if he is willing to return. It would ruin any chance there might be for him. They'd never believe he was intending to give himself up if they found him a prisoner here. Anyway, you have no authority to take him into custody."

Tojo smiled blandly.

"I am certain the young lady has acted in only the most charitable intentions," he said softly, "but that does not excuse us from performing our obvious duty. As far as authority is concerned, I'm sure the intelligent officers of Earth will overlook a slight violation of the letter of the law, in return for the custody of a culprit whom they are seeking. In fact they will probably be extremely grateful to us for our diligence and caution."

Ward was silent, but his brain was working swiftly. First, he realized that any attempt to escape would be foolishly impossible. Tojo and the Baron were determined to hold him, that was obvious. But why? Why were they so intent on his capture? There was an undercurrent of feeling in the room that he couldn't analyze. Something was very rotten in the situation, but he was at a dead loss to place his finger on it.

The only possible course for him was to play along in the role he was cast. That way he might pick up a clue as to what was brewing on this planetoid, and in the minds of its inhabitants. How he would utilize such information was another problem, possibly an insurmountable one, but he would face it when it arose.

"All right," he said heavily, "I seem to be booked."

He glanced at Ann and the bitterness in his eyes was not part of his act.

"I hope you're satisfied with your girl scout activity," he said ironically. "You can see it's helped a lot."

Ann's gaze dropped.

"I—I'm terribly sorry, Ward," she said miserably. "I've ruined everything in my clumsy effort to help."

Tojo coughed discreetly.

"I dislike to intrude," he said, "but

necessity demands that I do. Until the fleet units from Earth arrive we must confine the young Lieutenant incommunicado."

He turned and bowed gravely to Ward.

"If you are quite ready," he said with faint sarcasm, "my men will escort you to your—ah—chamber."

"I am quite ready," Ward said grimly.

A signal passed between Tojo and the two stocky half breeds in the doorway, and they stepped forward one on either side of Ward. In silence Ward followed them from the room to the narrow street.

They led bim several bundred yards away from the main cluster of buildings to a small, ruggedly built, windowless structure. They opened the hut's single door and when he stepped inside they slammed it after him.

STANDING in the semi-darkness of the room, Ward waited until he heard the footsteps of his guards fading away before making a quick, thorough examination of his prison.

In spite of its crudeness it seemed escape proof. The one door was latched from the outside and the wood planking that constituted the walls was at least two inches thick.

He was unarmed. He didn't even have a flashlight. All of his weapons and equipment were back on Earth, along with the naval uniform he no longer had a right to wear.

Suddenly an electrifying thought clicked in his brain.

He wasn't wearing his uniform, but still Tojo and tbe Baron had referred to him as Lieutenant, even before Ann had arrived.

How had they known he was an officer?

There was no possible way that they could have known, unless they had heen notified that he was on his way to the planetoid. But that was impossible. For there was no means of communicating with Exile Planetoid from Earth. That bad been one of the conditions imposed on the banished war makers. Their exile from Earth was meant to be complete and final and for that reason no method of communication had ever been estahlished on Exile Planetoid.

Still . . .

The baron and Tojo had given themselves away by their references to his rank. And if they had been informed that he was on his way to their planetoid, they must also have been told of his court martial and all the facts relating to it. They had not mentioned that, however. Ward realized that they couldn't without giving themselves away. Tbe arrival of Ann had been most opportune for them, he saw.

When she spoke of his theft of the space ship and his court martial it gave Tojo and the baron the opportunity to act without committing themselves.

The only answer was that, somehow, Exile Planetoid was in direct communication with Earth. That was a very serious state of affairs. For it meant that Exile Planetoid had managed to obtain metals, condensers, coils, visiplates—all the forbidden products required to huild a space transmitter.

If they had managed to do this, what other plans had they made?

Ward paced the narrow confines of his cell worriedly. Something was brewing that was a direct menace to Earth. It was the thing he had been brought up to expect by his father.

He had not the faintest idea of what was going to happen, or how it was going to happen. But he had had the definite conviction that events were ready to explode. He could sense it

in the faint contempt that was evident in Tojo's attitude, and in the bluff arrogance of the baron. Still more conclusive was the fact that the renegades of this planetoid had managed to establish contact with someone on Earth.

That meant that a fifth column was in existence.

WARD balled his hands into square knotty fists. It was maddening to know these things and be powerless to prevent them, to be unable to warn the outer defenses of Earth to be on their guard. Even if he could warn them what could he say to make them realize the potential dangers of the situation?

Exile Planetoid had no space ships. How could they attack Earth? Even Ward was ready to admit that it would be impossible to destroy Earth with only a space wireless. Still, an investigation should be made, Earth should be informed of the existence of a forbidden transmitter.

Ward suddenly snapped his fingers.

If a hidden transmitter was in use on Exile Planetoid it might be possible to use it to inform Earth receiving stations of its existence.

Ward was familiar with the common types of transmitters in current use and he had no doubt of his ability to operate the instrument on Exile Planetoid.

He smiled wryly as he sat down on a narrow cot that was placed against one wall of the room. All he had to do was smash his way out of this cell, find the hidden transmitter, overpower whoever was operating it and send his warning to Earth.

That was all.

Then his smile faded and tight hard lines of determination cut into his mouth. If that's what had to be done—then that's what *would* be done.

"Putting first things first," he muttered into the darkness, "getting out of here is the first point to consider."

Night fell. "Night" on Exile Planetoid lasted a little less than two hours, and Ward knew that whatever he hoped to accomplish would have to be done in that brief two-hour stretch of darkness.

He made another careful examination of the small room in which he was confined, and he was forced to admit that he was securely trapped.

A half-hour passed and his impatience increased. A precious half-hour of darkness wasted.

Then he heard footsteps approaching. As they neared, his thoughts churned frantically.

Any break he intended making would have to be made now or not at all. The footsteps approaching might be those of the guards returning with food, or for the purpose of transferring him to another cell-room.

Whatever their reason for returning, Ward was grimly determined to seize an opportunity, however slight, to break free.

THE steps came to a halt and after a slight wait, Ward saw the door of the cell swing open, revealing the bulky short figures of the two half breeds who had accompanied him to this guard house an hour or so before.

One of the guards, a sullen-looking man with a predatory nose and full, pendulous lips, carried in his hands a crude tureen, from which steaming vapors emerged. The other guard held a heavy club in his hands, and his dull piggish eyes watched Ward unblinkingly. There was a sadistic gleam in those eyes, and Ward knew the fellow would take a savage delight in using the knotty club on his head.

Neither of the two guards spoke a word as they shuffled into the room.

The one with the steaming pot in his hands extended it to Ward with a peremptory gesture.

It was obvious that it contained some form of soup or stew. Evidently, Ward thought bitterly, they didn't intend to starve him. That wouldn't suit their plans. They were anxious to turn him over to the Earth space force which would put in an appearance in a few hours. In that way they would lull any dormant suspicions in the minds of the commanders of Earth's fighting forces, and reveal themselves in the light of peaceful, trustworthy people whose only aim and ambition was cooperation and friendliness with Earth. This deception would give them even greater opportunity to complete their rebellion against Earth without interference.

What shape or form their rebellion would take, Ward hadn't the faintest idea. The mere idea of Exile Planetoid, a barren, desolate speck in space, inhabited by only a few thousand unarmed humans, plotting rebellion against mighty Earth seemed preposterous, but Ward was bitterly aware that appearances could often be dangerously deceptive. No one on Earth, he knew, would dream that Exile Planetoid had established communication with Earth. Ward found that hard to believe himself, still the irrefutable evidence was there. They *had* known that he was on his way to the planetoid. If they had accomplished this much, what other forbidden projects might they be planning? What was their ultimate objective?

Ward intended to find out — and damn the cost!

The hook-nosed guard was still standing before him, the steaming kettle in his hands, when Ward suddenly decided that speculation and guess-work would get him nowhere.

Too much talking had already been done. That was the trouble with the Earth Council. Investigation followed investigation, discussion was interminable, and blunt direct action was never achieved.

WARD suddenly galvanized into blunt, direct action. With one sweeping blow he knocked the steaming kettle from the guard's hands. Surprised, the guard staggered back, and Ward stepped in, his fist swinging in a short vicious arc.

A shrill, pain-crazed scream tore through the room as his fist landed with a crunching smack on the guard's jaw. But it wasn't the guard he had hit who had screamed.

Wheeling, Ward saw that the guard who had carried the club was lying on the floor, screaming wildly, his entire torso drenched with the scalding hot contents of the soup tureen.

The club was lying on the floor, forgotten by the man in his pain. Ward scooped it up and turned to face the hook-nosed guard, who was scrambling to his feet and lunging at him.

With deliberate viciousness Ward swung the heavy club in a terrible, two-handed blow that caught the charging guard along the temple.

Like a stunned steer, the hook-nosed half breed staggered backwards, his hands instinctively moving in a faltering gesture to his fractured skull. No sound came from his lips, no expression glistened in his glazed eyes as he fell to the hard floor and rolled limply onto his side.

The screams of the scalded guard continued to hammer against Ward's ears as he stepped quickly through the door of the crude prison. The blackness of Exile Planetoid's brief night enveloped him instantly with its friendly oblivion.

Ward paused only to make sure of

his directions, then he ran through the darkness, toward the main cluster of buildings. He wasn't sure the space transmitter would be there, but there wasn't time to reconnoiter or proceed cautiously. His escape would be known to every person on the planetoid in a matter of minutes, and he had to make those minutes count.

When he reached the narrow rutted pathway that led directly to the heart of the small village, he slowed to a walk. In a few moments the bulk of the somewhat larger building which served as headquarters to the inhabitants of the planetoid loomed before him.

Moving cautiously, he crept forward. He heard no voices and saw no evidence of any of its inhabitants. At the door of the wooden structure he paused. There was something unnatural and worrisome in this quietness.

For another few seconds he hesitated. He glanced over his shoulder, probing the blackness anxiously, then he opened the door a cautious inch.

The interior of the room was lighted by a single lamp which threw grotesque shadows over the barren furnishings. There was only one person in the room as far as he could see.

DIRECTLY in line with the small angle of vision afforded him by the narrow opening of the door was Ann Lear. He could only see her profile, but the anxiety in her expression was unmistakable.

The soft glow of the room's single light transformed her blonde hair into a golden halo, and in her snug breeches and absurdly small boots, she looked so small and helpless that for an instant Ward felt his old feeling for her creeping over him.

Then his jaw hardened. Memory can be almost as bitter as it can be pleasant. And Ward was remembering now that this girl had failed to trust him, or believe in him, when he desperately needed her confidence.

Also, her arrival here had plunged him into the dangerous predicament he was now in. Her motive in following him to Exile Planetoid was fathomless to him. Maybe her intentions had been good, but the results had certainly been disastrous. In her foolish desire to help him was a parallel of her campaign to liberate the mad war dogs in Exile Planetoid. An altruistic, sentimental idea which, if realized, could result only in disaster.

As he crouched in the darkness at the door Ward was forced to realize that in spite of all, that this girl and he were the only force that might stand between the barbarians of Exile Planetoid and Earth.

He *had* to make her listen and believe him. If he failed now to convince her of the potential menace on Exile Planetoid, it might be calamitous to all the blind billions of Earth.

With another glance over his shoulder he opened the door, slipped into the door and shoved it shut. Standing with his back pressed to the door, he made a gesture for silence, as Ann sprang to her feet, startled, her eyes widening incredulously.

"Oh, Ward," she said breathlessly, "I—I can't believe it. They did release you, after all. I've been hating myself ever since they took you away. But now I know everything will be all right."

"They didn't release me," Ward said. His eyes flicked about the room as he spoke. "I killed two guards to get here."

ANN'S small delicate features paled and one hand moved instinctively to her heart.

"Ward, you don't know what you're

saying," she said, in almost a whisper.

He smiled mirthlessly, his eyes like hot points of dry flame.

"I'm sorry you're shocked," he said, his voice rough and bitter.

Her wide eyes met his unbelievingly. There was fear and anxiety and horror in her gaze.

"You are a beast," she said, wbispering the words.

"Sure," Ward said savagely, "I'm everything you think and probably worse. I've killed two people and I bave no regrets. That fact isn't important now. What is important is that serious trouble is brewing here on Exile Planetoid. Somewhere on this planetoid is a space transmitter. I've got to find it and warn Earth. On my own I haven't much of a chance, but you can help me, if you will."

Ann made a gesture of helpless misery with her hand.

"Ward, you're so saturated with bitterness now that you aren't thinking straight. How could these poor helpless people possibly be a menace to Earth? You've let your feelings run away with your common sense. You've even let your hatred drive you to murder. Stop, please stop, while there's still some chance for you."

Ward's jaw set grimly. Striding across the room he grabbed ber shoulders and shook her roughly.

"I don't want sermons, damn it," he grated, "I want cooperation."

He released her then slowly, knowing intuitively that his bull-headed anger had destroyed whatever slim chance there might have been of enlisting her aid.

There were twin points of red in the girl's cheeks as she backed sligbtly from him. She was angry, but beneath her anger there was a pitying contempt.

"Why should I help you?" she asked quietly. "Do you imagine that I want a part in your insane, murderous plans? At one time, Ward, I would have done anything you asked me, but now I wouldn't assist you if your life depended on it."

Ward felt a rising panic that was impossible to quell. Something in the quiet, almost fatalistic determination of her voice chilled him. It wasn't his own fate alone that would be decided by her attitude, but possibly the fate of Earth, itself.

"Ann," he said desperately, "anything I might ask you to do is not for myself, please believe that. It's because the bappiness, maybe the lives, of millions of people, might hang on what happens here in the next few minutes, that I'm asking you to help me. If you have contempt for me, I'm sorry, but that shouldn't prevent you from listening to me, especially since the issue is so terribly important."

SOMETHING in the burning sincerity of his voice held her interest.

"E—everytbing is so mixed up," sbe said, her voice faltering, "that nothing makes sense. What you're doing is wrong, it can't possibly be right, but I feel as if I should help you if I can. Ward, is it possible for a person to trust another person, and still not believe in what that person does?"

Ward shook his head.

"It's all or nothing in my book," he said. "If you mean you trust me, but not what I say and believe, you don't make sense."

He shot an anxious glance at the door. Ann was weakening, but while they were quibbling precious time was slipping inexorably past.

"We haven't time to waste on philosopby," he said. "It's got to be one thing or another, with me or against me. Will you belp?"

He waited tensely for her answer,

every muscle of his hody tight with impatience. She pressed her hands close to her temples and howed her head.

When she looked up at him her face was weary with the struggle within herself. She made a useless, helpless gesture with her hand and her slight shoulders slumped as if a heavy physical weight was resting there.

She said, "'I can't make—"

The sentence was never finished. A hoarse shout from without drowned out her words. The single door of the room hanged open and the arrogant hulk of Baron Von Multke filled the doorway.

His square, stolid face was flushed with triumph, and his cold, hlue eyes flashed haughtily as they flicked from the girl to Ward.

A mirthless grin touched his lips and his hig shoulders shook with silent laughter.

"So," he sneered, "the troublesome bird has tired of his cage already, eh?"

CHAPTER VI

Into the Void!

WARD had wheeled at the first sound of the haron's entrance, and now he crouched motionless, his thoughts hoiling hotly.

One advantage was his and it was not apparent to anyone in the room, even to himself. When he had hroke from the crude room he had determined to act—directly, savagely, without reckoning the odds or the cost.

That determination was still with him.

The haron was relaxed and lazily confident, savoring to the full his moment of triumph. He dominated the scene enjoying hugely the feeling of power and ruthlessness that the young Earth officer's helplessness afforded him. Helpless—there was no doubt of that. A dozen men were within sound of his voice, the Earth officer was trapped like a rat in a trap.

These thoughts were an elixir to his hrain as he swaggered into the room hestowing a smirking glance at Ann's pale, terrified face.

He had no way of knowing that Ward's wary eyes had heen watching for just such a chance. In that hrief second while the haron was smirking at Ann, his attention was diverted from Ward.

And in that hrief second Ward acted —directly, savagely, ohlivious to cost or odds.

His lean, whip-cord muscles coiled like powerful springs and he launched himself at the haron. He dove low, twisting in mid-air to hring his hard, flat hip into the haron's knees.

The haron turned, hut not soon enough. Ward's hard driving hody swept under him with savage force, dumping him to the floor in a sprawling hreathless tangle.

Ward rolled to his feet with the momentum of his drive and lunged for the open door. Behind him he heard the haron bellowing like an outraged hull as he clamhered awkwardly to his feet.

Then Ward was outside in the darkness.

He heard shouted voices and heard footsteps drumming toward the hulldding he had just left. Without a second's pause he set out at a hard driving run in the opposite direction.

The narrow street was almost pitch-dark and twice in twenty feet Ward sprawled to the hard ground as his foot turned in a rut or hole.

A desperate glance over his shoulder revealed a milling crowd of men at the door of the huilding and in the center of the crowd he could make out the har-

on's huge figure, and hear his shouted commands.

WARD redouhled his speed, hut it was that very fact that almost cost him his life. His footsteps drummed loudly against the solid ground and the sound must have carried hack to the haron, for Ward suddenly heard him curse wildly at the men huddled ahout him, and the next instant a dozen of them hroke away from the crowd and started in the direction he had taken.

Ward was only a hundred feet or so ahead of them, hut they knew every inch of the terrain and he was running blindly.

Suddenly the pursuers stopped and Ward drove on.

An instant later a cry sounded from the pack and they were after him again. Ward realized then that they had stopped in order to listen to his footheats, and determine his direction accordingly.

In the darkness he could tell they were gaining on him hy the increased volume of their excited shouts. Desperately he struck off at a right angle to the original direction he'd taken, and for a moment or so he ran at full speed.

He was listening carefully now for the drumming feet of his pursuers and when they stopped suddenly, he stopped too, crouching silently still in the hlackness. A minute passed.

From off to his right he heard a disappointed murmur from the pack that had heen on his trail.

He waited motionlessly until he heard their footsteps again, this time fading in another direction.

For several minutes he remained motionless in the deep blackness, hut he realized that when light again streamed over this planetoid his liherty would be at end. So, probably, would his life.

Cautiously he started walking. He knew that only a dozen or so square miles of Exile Planetoid were hahitahle and he wanted to get as far as possible from the central village while the darkness lasted. Possihly in one of the arid, desolate stretches of the planetoid he could find a haven where he could hide during the long day.

He had not progressed a dozen feet, walking carefully and lightly, when he heard footsteps to his right—dangerously close.

Crouching, he held his breath.

The footsteps approached warily and then he saw the vague bulky outlines of a man moving through the darkness. Ward crouched closer to the ground as he saw that the man's course would lead him within three feet of his position.

It was too close for comfort. Too close for safety.

Ward acted again with savage directness when the squat man passed. Rising to his feet he stepped stealthily after him.

The stocky half-breed knew only one sensation when the steel-hard, mercilessly strong forearm suddenly locked around his neck. That sensation was a horrible gasping struggle for breath that never came.

WHEN the quiet struggle was over Ward stretched the man on the ground, hut as he started away his foot struck a hard, metallic ohject lying next to the dead man.

Stooping he picked it up. As his fingers touched its cold hard surface an involuntary shock went through him. Even in the darkness he knew what he held in his hands.

It was a weapon, a deadly electric arc gun, the type used by the fighting forces of Earth. Ward had handled them

thousands of times, and even in the blackness there could be no mistake in his identification.

A cold feeling of dread struck him forcibly.

A gun of this type on Exile Planetoid, in the hands of a brutish breed native, confirmed his darkest suspicions. The self-appointed leaders of Exile Planetoid had discovered a way to secure arms and other forbidden equipment. This might have been going on for years, Ward knew.

Slipping the electric arc gun into his belt, he continued on, walking swiftly to take advantage of every fleeting second of darkness. In ten minutes he had traveled over a mile and the sounds of pursuit had died out completely.

A purple dawn was breaking twenty minutes later. Ward was far enough by then from the central cluster of structures to be out of sight. The bulge of the planetoid's outer crust was between him and the living section of the tiny village.

He was in a ragged, rutted terrain, devoid of vegetation, starkly bare and primitive. The flaky porous rock of a pale green color which comprised the surface of the planetoid was split into deep gashes by erosion. These valleys were almost uniformly symmetrical and at least a dozen of them stretched before bim.

They seemed to present the only logical hiding place on the planetoid. Here he might wait for another stretch of darkness to provide him the opportunity to continue his search for the space transmitter. He was hungry and thirsty but that he would have to endure.

The gashes in the crust of the planetoid were almost ten feet deep and they extended in each direction, following the curve of the planetoid.

The purple dawn was merging into bright revealing daylight. Without wasting any more time Ward scrambled down the steep sides of the nearest gully.

The erosion-formed gash was almost six feet wide and the bottom was nearly level. Ward realized that in his present position he would be perfectly visible to anyone from the rim of the valley.

He started walking then following the curve of the gulley, looking carefully for some crevice or niche that might afford a place of concealment.

SEVERAL minutes later, as he was rounding an unusually sharp bend of the curving gulley, he saw a strange contraption directly ahead of him.

It was some sort of vehicle, about twenty feet long and four feet wide, made of some strange metallic material that was rusted and scarred from age and use. It looked somewhat like a tiny submarine. There was a heavy glass window in the front of the dilapidated machine, and it had flaring fins at the tail, warped and cracked from the damp climate.

In the rear were four blackened, blistered tubes, much like the rocket tubes on a standard space ship.

It was this feature that tripped a forgotten cog in Ward's memory. He recalled now, looking at this odd deserted contraption, that the exiles on the planetoid had been granted permission years ago to use small lighter-than-air craft to transport material from one end of the planetoid to the other.

This was obviously one of those ships, blackened and rusted now from disuse. Curiosity impelled bim to open the creaking door and peer into the dusty interior of the ancient ship.

The bright outside light streamed through the glass window in the cowl of the ship revealing a cobwebbed instrument panel and rusty controls.

Ward smiled thinly as his glance traveled over the inside of the ship. It was obviously deserted and forgotten and for that very reason it might provide an excellent hiding place for him.

When he squeezed through the narrow door and made a more careful inspection of the ship's equipment his eyes narrowed thoughtfully.

With a careful finger he touched a thin dark smudge on one of the control gears. It was a stain of oil—fresh, high quality oil!

In a flash he understood that the decrepit appearance of this ship was deceptive—as deceptive as everything else on this grim planetoid.

His eyes swept carefully over the control. In spite of their misleading appearance, his trained gaze told him they were in perfect condition.

One device above the instrument was beyond his comprehension. It was a white screen approximately two feet square, criss-crossed with horizontal and perpendicular lines. They dissected the screen into thousands of tiny squares. At the top of the square panel was a glowing red disc almost an inch in diameter.

He stepped closer to examine the intricate arrangement, but suddenly he stopped, every muscle tightening.

A hoarse, faint shout had reached his ears!

IT WAS answered by another voice closer than the first, and a second later a full throated chorus of voices sounded. There was the unmistakable cry of the hunting pack in the chilling, high-pitched babel of voices.

Ward felt his heart pounding suffocatingly against his ribs. If his hiding place had been discovered, he was as good as dead. In the broad revealing daylight he wouldn't have a chance of eluding his pursuers.

He stepped quickly to the narrow open door and one cautious glance confirmed his worst fears. Advancing toward the ship along the rims of the gulley were a dozen of the swart, stocky half-breed inhabitants of Exile Planetoid. They were all armed with electric-arc guns and there were smiles of savage anticipation on their thick features.

They hadn't seen him yet, but it was obvious they realized that they had cornered their quarry.

Desperately he slammed the door and was relieved to hear the solid heavy metallic click as it banged shut. The rickety rusty appearance of the door was also a sham; it swung shut on well-oiled hinges and the wall of the ship presented a solid, hermetically welded expanse after it closed.

A fantastic idea was hammering at Ward's brain. If he could take this ship into the air he could land on the opposite side of the planetoid. It might be only a temporary respite, but it was better than nothing.

The shouts of the approaching pack were ringing with exultant discovery now. They had probably seen the door of the ship close.

Ward sprang to the controls. They weren't all familiar to him, but he was experienced enough to guess their use.

Quickly he made the necessary adjustments. As his hand reached for the contact lever he heard a sudden hammering against the door of the ship. Hoarse, screaming shouts sounded hollowly through the thick metal walls of the ship.

"Come and take me, damn you!" Ward grated.

His hand flicked the contact lever into position with a savage snap.

A thunderous roar blasted into his

ears as the rocket exhausts roared into furious life. Ward listened incredulously. The deep-throated, powerful discharge of energy was completely out of proportion to the size and purpose of the ship.

Its reverberating chant of power sounded more like the blast of a mighty space fighter, than the rockets of a decrepit ship built for short hops through the atmosphere.

Almost apprehensively Ward moved the contact lever forward into firing position.

The mighty bellow of the rocket blasts faded almost instantly to a smooth level hymn of leashed power. The ship shuddered sensitively as the exhaust valves stored thousands of pounds of blasting energy in a fraction of a second; then with a hissing scream as it slashed through the dense atmosphere of Exile Planetoid, the ship rocketed into the void!

CHAPTER VII

An Incredible Discovery

THE jarring abruptness of the blast-off stunned Ward for an instant. When he had heard the throbbing roar of the rocket exhausts, he had guessed the truth, but the shocking reality of the blast-off completely confirmed his guess.

He was in a spaceship, a compact, magnificently operating space ship which had been deliberately designed by the inhabitants of Exile Planetoid to look like an abandoned land craft.

Space transmitters, guns and space ships, all in operation on Exile Planetoid. Ward cursed bitterly the negligent stupidity of the Earth Council that had allowed the exiled war dogs to build or obtain these instruments and weapons.

But it was too late for recriminations now. Ward knew that a job was ahead for Earth, the same job that it had faced in other times of its history. And that job was the suppressing again of the murderous hordes who were rising to trample under their iron heels the rights of mankind.

He turned to the controls. An illumined visi-screen which he had not noticed before showed that the ship was plummeting directly toward the pin point of red light that was Mars.

The velocity of his ship was near that of light, itself, faster than he had ever traveled in Earth ships.

Ward frowned nervously as he realized that the ship was apparently set on a definite course — and that course was for the inaccessible, impenetrable red planet of Mars.

He knew it was impossible for any space ship to reach Mars. Many Earth ships had tried and failed. Some had never returned. The mighty electrical storms that raged above the atmosphere of Mars made the planet a deadly pariah of the solar system.

For a moment Ward debated the advisability of attempting to change the course of the speeding ship. Finally he decided against it. A grim smile touched his lips as he made his decision and settled back against the ragged upholstery of the pilot's chair. A deep, intuitive hunch was working on him. As the little ship flashed through the void, Ward's eyes were fixed on the mysterious, sullen pinpoint of red light that was Mars, and there was a thoughtful, speculative expression on his face.

HOURS later when the red eye of Mars had swollen to a huge orb, obliterating almost half the visi-screen, Ward straightened up, an anxious frown on his face.

The ship would soon be within the

gravitational attraction of the red planet and then it might he too late for him to change the course of the ship. Already he could see the white, vaporish mists which enshrouded the planet and he knew that their harmless appearance was extremely deceptive.

Those mists were the visual evidence of the titanic electro-magnetic storms that broke about the planet. Soon the ship would be feeling their effect . . .

Still Ward sat motionlessly before the controls, making no move to alter the course of the ship.

Several minutes later, he suddenly noticed that the course of the ship was changing. Quickly he checked the controls, realizing that a gear or lever might have slipped.

But all the instruments were in perfect order and position.

Then Ward glanced upward and noticed the white screen with tbe crisscrossed lines for the first time. The glowing red ball above the screen was in motion, veering slowly down to the left.

Ward realized suddenly that the sbip was veering in the same direction. The glowing ball hesitated for an instant, then shifted back to the right and moved diagonally to the far corner of the screen.

The ship swung to the right, and tbe differential altimeter recorded a sharp gain in the flight height of the ship.

Ward's hands clenched excitedly. Tbe ship was definitely following the gyrations of that glowing ball above the white screen.

For a half hour the ship maneuvered according to the movement of the lazily floating ball, and then Ward glanced at the visi-screen and saw that the ship was almost in the electrical storm area.

Within another thousand miles he was near enough to see tbe mighty mile-long streaks of brilliant ligbting that stabbed through space like the lances of mighty giants. No tbunder accompanied the terrifying display, but the eerie silence of the gigantic unleashing of energy only added to its effect.

The ship was veering sharply now—right—left—down— Ward flashed a glance at the controls. They were set as they had been leaving Exile Planetoid. The ship was obviously being directed hy other than its own controls.

The blinding glare of the raging electrical storm was in bis eyes now, searing his gaze painfully. The entire ship was bathed in glaring white luminence, and the titanic bolts of ligbtning were playing ahout the ship like immense, gleaming swords.

Great waves of burning light swept over the ship, but miraculously, there was always a dark hole in the roaring sheets of flame through which the little ship slipped unerringly.

SWEAT was pouring from Ward's pores and his bands were clenched until the knuckles whitened with tbe strain. Never had he imagined that the void could be so starkly fearful and horrible. One bolt of lightning, one sheet of flame would be enough to instantly transform the ship and himself to a tiny black cinder.

Still the small ship, an infinitesimal speck against tbe vastness of this roaring storm, flashed steadfastly on, veering and cutting sharply, but always finding a safe pathway through the maelstrom of the unimaginably vast inferno.

Ward lost track of time. The only thing that seemed real was the blinding explosions of Nature's fury, and the almost unbearable heat generated by the storm.

How long the passage took, he had no way of knowing. One instant he was diving headlong into an engulfing

wave of white flame—the next instant the ship was through a dark hole and into the heavy, quiet atmosphere of Mars. The change was so abrupt that Ward shook his head dazedly.

The turbulence of the electrical storm was behind him, and ahead of him he could see the surface of the great planet, Mars.

The sprawling panoramic vista that spread under the diving nose of his ship left him breathlessly stunned.

He had expected barren plains and uncultivated vegetation, wildness and desolation. These had been his subconscious idea of what Mars, the mysterious, uninhabited planet would be like.

Instead he was flashing downward into the midst of great vast structures, mighty buildings of gleaming metal, an immense city comparable to the largest cities of Earth.

In that one panoramic impression he saw a vast space landing field, dozens and dozens of sky-piercing mooring towers and rows of expulsion tubes.

For a dazed instant he stared bewilderedly at the vast city. His thoughts were spinning desperately. This could mean but one thing!

The sudden materialization of the sprawling structures of the Martian city had so stunned him that for an instant he had forgotten the plummeting speed of his ship.

As he saw the ground leaping up at him he suddenly realized his danger. With a swift snap of his wrist he jammed the repulsion rockets into full life.

The ship bucked strainingly as its terrific speed was abruptly opposed by the powerful forward rockets.

But Ward's swift action came too late. The ground sprang up at the speeding ship. Ward frantically released the full charge of the emergency crash propulsion rockets. Their tremendous blast checked the ship, almost halting it in mid-air.

Ward cut all power as the ship fell.

He heard the jarring crash of its impact but nothing else. His head snapped forward against the instrument panel and darkness swept over him, obliterating his senses.

CHAPTER VIII

Trapped!

WHEN light began to seep slowly through the mists of black fog that enshrouded Ward's brain, he shook his head groggily. He realized dimly that he was seated in a chair facing a broad expanse of whiteness.

This whiteness eventually came into focus as a huge window through which he could see a vast expansive space landing field spreading for many miles before his tired eyes.

Gradually full consciousness returned. His head ached intolerably, but other than that he seemed to be all right. The memory of his trip through the inferno of flame to Mars suddenly swept over him.

One hand touched his forehead wonderingly.

He had crashed . . .

What else had happened to him?

"Aha!" a mockingly solicitous voice sounded behind him. "Our visitor awakes!"

Ward felt a chilling shudder creep up his spine as he heard the mocking voice. His muscles tensed, as he swung about in the chair, disbelieving the evidence of his ears.

Seated behind a huge gleaming desk at the far end of the high-ceilinged room, his dark hair glinting in the bright light, was the thin arrogant figure of Major Slade—Major Slade of Earth's

Space Navy!

A mirtbless grin touched bis thin lips, but his small glittering eyes were as cold as twin diamonds. A contemptuous, mocking expression twisted bis thin features.

"You appear surprised," Major Slade said blandly, "to see me."

Ward stared at the man incredulously, almost doubting his eyes. He hardly dared ask himself the questions that were hammering at his reason.

His eyes swung about the huge, luxuriously fitted room which overlooked the vast space landing field. Charts and graphs covered the walls and behind the gleaming desk a great white screen, protected with heavy glass, had been erected. It was criss-crossed with thousand of lines and at the top of the screen a flaming ball hung suspended. The screen, Ward realized with quickening interest, was an immensely larger edition of the one in the space ship he had stolen from Exile Planetoid.

"An interesting device," the major said, still smiling mockingly. "It is a directional screen which enables space craft equipped with its model to safely penetrate the normally fatal electrical areas which we have synthetically thrown about the planet."

Ward did not immediately grasp the import of this explanation. But when its significant implication did sink in, he felt a wave of chilling apprehension sweep over him.

The major's laugh was coldly amused as he saw the emotion on Ward's face.

"I see," he said, "that you are beginning to understand. A pity that it took you so long, isn't it? That is, it's a pity for you. For it is no longer of any importance what you understand or discover. You are no longer dangerous. The last chapter is about to begin and you, or anyone else for that matter, cannot prevent it."

WARD was staring at the man in fascination as be spoke. The implications behind his words were monstrous.

Ward felt as if his eyes had suddenly been opened for the first time, permitting him a view of the complete pattern of events and their significance.

It was not a pretty picture.

A door on one side of the room slid noiselessly open and a brown-skinned, bland little Japanese entered.

Ward's eyes swung to the new arrival. His hands tightened into angry fists as he recognized the new arrival as Tojo—the dapper, suave renegade from Exile Panetoid.

The rough denim clothes had been replaced by an immaculate uniform, and the affected pose of deference had fallen away with them.

Major Slade rose to his feet and saluted.

Tojo returned tbe salute before turning to Ward, a flicker of amusement glinting in his small dark eyes.

"Ah!" he said softly, "we meet again. I trust the impetuous Lieutenant suffered no serious effects from his rather abrupt landing on our planet. Such clumsiness is excusable in Earth Space pilots. In fact I am delighted at every fresh evidence of the inexpertness of Earth's fightlng forces. It is a definite indication tbat our pilots will have little difficulty melting them out of the universe."

Ward curbed the hot remark that was on his tongue. He realized that words would accomplisb nothing. A black despair crept close to him as he observed Tojo's confident complacence. He couldn't keep his eyes from shifting to the swarming space landing field that was visible through the great plate window. *That* explained the Jap's confidence.

Tojo's sharp eyes followed his glance.

"Very pretty, is it not?" he smiled. "I am gratified at your appreciation. After all, the work here on Mars was commenced almost sixty years ago, and it *is* worthy of comment."

Ward felt a revulsion for the suave-smiling Japanese that was almost enough to turn his stomach. But his words were even more sickening.

Sixty years ago—

For sixty years the renegades of Exile Planetoid had heen plotting and huilding while Earth slumbered complacently.

Major Slade had said that he was too late; that he'd arrived just in time for the last chapter, and Ward suddenly realized what he had meant. The last chapter, the culmination of decades of sly betrayal, could only be an attack on Earth.

That was the last chapter which was about to be written.

AN ICY sweat made his forehead clammy as thoughts leaped heyond the present—great fleets of ships hlasting savagely into the unprepared, unsuspecting people of Earth—

Ward shifted slightly in his chair until he faced the thin figure of the major directly. Even greater than his concern for Earth was his hatred of this man.

Under his hlazing gaze the major's icy poise melted slightly. A faint flush touched his cheek as he read the terrible contempt in Ward's eyes.

Ward's anger was heyond the restraint of caution.

"You rotten traitor!" he spat the words out.

The major's pale thin features were stained red, but his voice was coolly mocking as he said:

"Very nasty words, Blackson. But I prefer the term 'opportunist' myself. It's ohvious that the outmoded democratic principles of Earth are unsuited to the development of the universe. Power and force, judiciously administered of course, are needed to properly exploit the potential wealth of the solar system."

Tojo held up a slim hrown hand.

"Let us not argue," he said. "Actually there is nothing to argue about. Argument will not change the inevitahle result. Lieutenant Blackson be so good as to glance at our extremely modern space field again. At the far end you will notice a line of space dreadnaughts, each one superior to any the forces of Earth possess."

Ward turned his head and saw the line of ships indicated hy Tojo's pointed finger. They were at the extreme far end of the field, mighty hlack ships, almost a thousand feet in overall length. From their position in relation to the mammoth expulsion tubes which thrust their huge snouts hundreds of feet into the air, it was ohvious that they were ready for an immediate hlast-off into the void.

Ward realized then that the huge black ship he had seen momentarily in the visi-screen on his first trip to Exile Planetoid had prohahly heen one of these hehemoths.

He turned back to the smiling Japanese, feeling a sickening moment of impotent anger and dread.

"Those ships," Tojo said with a soft lisp, "have been under construction for the last ten years. Now they are ready to fulfill the purpose for which they were huilt. In a very short time, a matter of minutes almost, they will leave for Earth. When they return, part of our deht will be repaid to the arrogant people of Earth who feel it their right to segregate us as if we were mad dogs.

"Our first attack on Earth will not be our last. The careless citizens of Earth have given us a priceless opportunity in the last century to grow strong,

to rebuild our weapons to make ourselves invincible in this stronghold.

"SIXTY years ago the leaders of the miserable tribes on Exile Planetoid discovered a means to cross the void to this planet of Mars. Their first task was to encircle the planet witb an electrical barrier which would prevent any snooping patrol ships from Earth arriving here unexpectedly. Immune then from interference, they built this base and resurrected their sciences and industries.

"Mars is rich in natural resources, and you may be sure tbey were not neglected. To alleviate suspicion a certain small band was left on Exile Planetoid. Birtb records were altered to make it appear as lf the population on the planetoid was steadily decreasing. Actually it was gaining each year, and the surplus population was transported here to take up the tasks wbich were awaiting them.

"Free from any interruption on the part of Earth we devoted each waking instant to the goal our ancestors set for us; the reconquest of Earth and the subjugation of the inferior races who now rule it. That end, I am happy to say, ls almost in view."

Major Slade grinned maddeningly at Ward.

"You see," he said softly, "as our Leader says, it is inevitable. Now you can understand why your insistence on patrols and investigative activity on Exile Planetoid were so very dangerous to our plans. Fortunately, you were unable to jar the stupid leaders of Earth from their complacent attitude. Nevertheless we had to shut your troublesome mouth. That, my excellent friend, is wby you were framed and court-martialed. If you bad accepted that fate you might have been able to save your life. Instead you stole a ship and made for Exile Planetoid. I informed Baron Von Multke that you were on your way and set out for Mars myself. Things were due to break and I desired most ardently to be on the winnlng side. In return for certain desirable information I have been promised a very advantageous position in the new order."

Tojo glanced obliquely at tbe major and smiled inscrutably.

"As usual the major is correct," he said softly. "But time is running short. Tbe designs of destiny must not be delayed. Lieutenant, we must bid you farewell. When we return from our engagement with the unprepared forces of Earth, we shall decide what is to be done witb you."

He stepped to the major's desk and pressed a button. A second later the metal door slid silently open and four stocky soldiers in uniforms entered. All were armed with electric arc pistols, and thin knives in belt scabbards.

TOJO spoke sbarply to them and one stepped to Ward's side. For a wild impulsive instant Ward tensed bimself to spring at the slight Japanese leader. But it was bopeless. The gesture would be a futile, desperate act whlch would gain him nothing but the oblivion of death.

He relaxed against the chair, while the heavy-set guard stepped behind him and passed a leather thong swiftly and expertly about his wrists. When his arms were helplessly bound the soldier drew his electric arc gun and pointed it at his bead.

Ward was facing the great white screen that was erected behind Slade's desk, and as the guard drew his gun from the thick pouch at bis belt, he fancied he saw the glowing red ball swing sligbtly to one side.

He couldn't be sure, for almost at the same instant Tojo sprang to the guard's

side and slapped bim viciously across the mouth.

"Fool!" he hissed.

The guard backed away from his fury, his face livid with fear. A white smear showed against his face where Tojo's savage slap had landed.

He mumbled something under his breath and hurriedly replaced the electric gun in its holster. Then he drew the long, razor-keen knife from his belt and planted himself before Ward.

Tojo smiled slightly and walked to the door.

Major Slade stepped around his desk and followed. His mocking glance brushed lightly over Ward.

"This appears to be the moment of parting," he said, his silky voice heavy with sarcasm. "Pleasant thoughts, my young friend."

Tojo reached the door and turned, a peculiar smile lighting his small inscrutable eyes.

"The major is correct as always," he murmured. "This is indeed the hour of parting." His eyes turned slowly and focused on Major Slade with a strange intensity.

"We shall always be indebted to you for the information and assistance you have so graciously tendered our cause. Perhaps the thought of our gratitude will make your end more bearable."

Tbe major stared at him bewilderedly, but a slow terror flickered in his eyes and brought points of red to his cheeks. Instinctively, he recoiled from the slight figure of the Japanese leader.

"N—no no," he choked.

The imperturbable Japanese spoke one soft word of command and the three remaining soldiers stepped swiftly forward and grabbed the major's arms.

WARD watched in a fascinated horror as the thin figure of the traitorous Earth officer writhed frantically and futilely in tbe grip of the swart, stocky balf-breed soldiers.

"You don't know what you're doing!" Slade babbled wildly. "You dirty, damn double-crosser!"

One of the guards slapped him heavily across the mouth. A thin trickle of blood and saliva drooled from bis open mouth.

"Please," Tojo said softly, "such scenes are deplorable. Surely, Major, you can realize that a man who would betray his country as you have done, is liable to do it again. For that lamentable reason you must be liquidated, in spite of the fact that you bave been extremely useful."

"Damn you!" Slade shrieked. "You rotten—"

Tojo raised one band slightly and the three impassive soldiers jerked the screaming man across the room and through the door.

Ward could hear his terror-filled curses as he was dragged down the corridor that flanked the room. Finally the shrieks grew fainter and then they faded away altogether.

Tojo sighed regretfully.

"A pity," he murmured.

Ward felt nothing but a grim exultation. Any pity he might have felt for Slade was destroyed by his knowledge of the man's treachery.

The slim Japanese spoke a few words to tbe remaining soldier and then, with a last suave bow to Ward, he stepped through the door.

It clicked silently shut after him.

Ward glanced up at the solid, squat soldier who guarded him. The man was a German-Jap breed with coffee-colored skin and pale blue eyes. His face was flat and stupid looking, but he was warily watchful.

He stood almost six feet from Ward, directly in front of him. The long knife he beld tightly in his hands was

pointed at a spot just below Ward's chin.

Ward's eyes flicked about the room, searching desperately for anything which he might use in escaping. There was nothing.

From where he was sitting he could command a view of the broad, sprawling space field through the immense window of the office.

Small figures were hurrying ahout and a general air of heightened activity dominated the scene. At the far end of the field he could see that the line of mighty space dreadnaughts were heing prepared for a blast-off.

Ward's eyes swung hack to the grimly impassive soldier. The thick-set guard's attenion was riveted on him. Hardly hy a flicker of an eyelash did his concentration waver.

WARD fought hack a mounting hysteria. The realization that a vast force of devastating space units were being readied for an onslaught on unsuspecting Earth, and the fact that he was futilely powerless to move a finger to prevent the catastrophe was maddening.

Desperately he strained against the leather bonds, hut he only succeeded in tightening them further.

The savage looking soldier moved closer as Ward struggled, his small piggish eyes lighting with bestial anticipation.

Ward ceased his efforts and slumped against the hack of the chair breathing heavily. An enervating despair settled on him, sapping his spirit and strength.

What could he accomplish if he were free? The answer was nothing. And his futile efforts to free himself would surely cost him his life. The guard, he knew, would like nothing hetter than to use his gleaming knife on his throat.

An apparently endless interval passed in grim silence.

Then— Ward heard a thunderous detonation from the sprawling space field. The reverherations from the mighty hlast jarred the floor under his feet.

Through the room's wide window he saw a crimson streak flash upward from one of the giant expulsion tubes at the far end of the field.

Silence settled for an instant. Silence that was shattered almost immediately hy another roaring hlast from an expulsion tube.

Again a crimson streak flashed upward.

Ward felt icy heads of sweat congealing on his forehead.

The mighty fleet of attacking space dreadnaughts was blasting off—on its way toward Earth!

In a fury of desperation he struggled like a madman at his honds. He had no real thought of escaping. It was just a desperate gesture that gave a release to his raging helplessness.

The guard inched closer, his knife ready.

When he was within four feet of him, Ward suddenly saw a chance—a foolhardy, million-to-one-chance—hut he seized it without hesitation.

Pressing his feet to the floor he shoved down with all his strength. The chair tilted ahruptly back and Ward fell heavily to the floor. He landed on his back, his knees drawn up to his stomach.

His desperate plan hinged completely on the guard's reaction. Fortunately he reacted just as Ward had prayed he would.

EYES flashing with excited anticipation, the stocky soldier sprang forward. Ward had one clear picture of his face—lips flattened in a snarl, nostrils flaring, eyes gleaming—hefore he

lashed out brutally with both feet at that savage countenance.

The soldier's eagerness had brought him into perfect range, and Ward's thick boots smashing into his jaw tumbled him backward to the floor.

Ward scramhled to his feet and kicked the chair to one side. His arms were still bound behind him, but he had a momentary advantage.

The knife was lying beside the groaning guard, but before Ward could reach it the fellow's groping fingers touched it and closed on its hilt.

With amazing strength the guard twisted about to face Ward. Although his jaw was hanging brokenly, he was far from out. His eyes blazed hatred at Ward as he struggled to his feet.

Blood and froth flecked bis broken lips and his features were twisted in a horrible grimace of pain. With the knife sweeping a dreadful path before him he lunged at Ward.

Miraculously Ward's sidewise leap saved him from the savage sweep of the knife. The guard was weakened from tbe sledge hammer blows he had received in the face, but Ward was hopelessly handicapped by his bound wrists.

If his hands were free—

The soldier lunged past him, the force of his rush carrying him into the wall. Turning he faced Ward again, his eyes glazing murderously.

With a snarl he charged again, driving low for Ward's knees. There was no time or room to sidestep. Caught directly in the line of the guard's lunge, Ward did tbe only thing possible.

He jerked his knee up with savage force into the guard's forehead. The force of the impact almost broke his knee cap. The charging soldier straigbtened convulsively, his neck twisting at an odd angle.

Then he slumped to the floor moaning. The knife fell from bis limp fingers with a clatter. For a moment his twisted body jerked spasmodically. Pain contorted his features. Tben his face slowly relaxed, tbe lines of pain faded away and his body slackened. His pain-clenched fists relaxed and opened.

Ward knew the man was dead.

BREATHING heavily he knelt beside him and groped for the knife with clumsy, stiffened fingers. It was a heart breaking task. Again and again the knife slipped from his fingers, but finally he managed to grasp it and began the tedious sawing at his leather bonds.

While he worked he kept anxious eyes on the sliding steel door. If more guards or soldiers arrived everything he had gained would be lost. If only his luck held. . . .

Before he managed to cut through the leather thongs his hands were slippery with bis own blood. Every time the knife slipped it lanced into his lacerated wrists, but he clamped his teeth against the pain and continued sawing.

Finally he was free. His wrists were raw from the leather strips and dark with caked blood, but he wasted no time in self-pity.

Crossing swiftly to the vast square window be saw that the fleet of space dreadnaughts were blasting-off one at a time, without the slightest delay. The thunderous detonations of their blast-off followed each other so closely as to blend into one continuous roar of sound.

The bulk of the fleet, however, was still on the ground.

Glancing up Ward could see faint flickerings of orange light tinting the upper atmosphere miles above his head. These reflections he knew, were caused by the proximity of the artificially created electrical storms which raged about

Mars. Even though the storm areas were hundreds of miles from the thin stratosphere of the planet, their radiations were strong enough to color the outer fringes of the atmosphere.

Ward swung around to the huge white screen, a sudden wild idea hammering at his brain. The large glowing ball at the top of the screen was in motion now, drifting slowly downward to the right.

This directional apparatus was responsible for the safe transit of the space ships through the electrical barrier that encircled the planet. At this very instant mighty space dreadnaughts were hurtling tbrough the raging storms their courses automatically and inflexibly determined by the master directional finder which Ward was facing.

Grim-lipped, Ward picked up a heavy metal chair and strode to the huge glass-incased screen. The glowing ball was moving to the left and shifting upward now, steering a whole fleet of mighty ships safely through the flashing sheets of orange and white flame which flasbed about the planet.

If that directional apparatus could be destroyed or damaged that fleet would be annihilated in the roaring bolocaust of electrical energy.

With all his strength he hurled the heavy chair at the glass barrier tbat protected tbe directional apparatus. The chair struck with a crash and bounced back to the floor.

The glass surface was unscratched.

Frantically Ward picked the chair up and smashed it again and again into the smooth surface of the glass harrier. The steel framework of the chair bent under the blows, but not a scratch appeared on the glass.

He might as well have been battering against a steel wall.

TURNING to the window again he saw that half the fleet was gone and the remaining half was blasting-off with swift regularity. In a few moments the entire fleet would be flashing tbrough the storm areas on its way to Earth.

Unless he could accomplish something in those few minutes it would be too late. Once beyond the electrical screen the fleet would be impregnable. Nothing he could do tben would be of any avail.

Suddenly his memory clicked. The scene that had occurred as Tojo was leaving flashed across his mind. The soldier had drawn his gun. Enraged, Tojo had slapped him.

Witb pounding pulses Ward dropped to his knees beslde the dead soldier and jerked the electric-arc gun from the holster at his belt. A dozen wild thoughts were churning in his brain.

There could only have been one reason why Tojo was alarmed at the presence of a gun in this room. And that reason was that its electrical waves might disturb tbe delicate directional apparatus.

Still that didn't sound logical. Electrical waves alone would not disturb the apparatus. The only thing which could affect the directional apparatus would be a magnetic influence operating on the metallic hall that marked the course on the screen.

Ward sprang to his feet. A glance at the window showed him that practically the entire fleet of space dreadnaughts had blasted-off.

There was not a second to lose. The glowing ball on the huge white screen was still moving in a slow orderly path. As long as it continued in that manner the fleet was safe in the blazing storm areas.

Magnetic influence! How could be bring a magnetic influence to bear on the directional globe?

That was the only thing that would throw it off its course and leave the

armada of dreadnaughts rudderless and blind in the synthetically produced maelstrom in space.

There was not time to construct a magnet. Even the crudest, most elementary type would take too much precious time.

Suddenly he wheeled to the screen, taking in the details of its construction with raking eyes. The screen itself was made of some sort of porous metal and the criss-crossed lines were formed by thin wires stretched tautly over its surface.

GRIMLY he flicked the firing button of the electric-arc gun and swung the thin barrel up to cover the center of the screen. Then he pressed the trigger.

The electric charge leaped from the muzzle of the gun in a bright blue stream. Striking the glass barrier it crackled with a sputtering *hiss,* but the heavy glass seemed impervious to the terrific heat and energy blasting into it.

Ward stepped up the charge to full strength, but the additional power was useless.

The glass barrier seemed capable of withstanding anything.

He groaned in despair. For a wild instant he thought he saw a way of smashing the directional screen. The steel screen with its circling of wires was a potential magnet in itself. If he could find some way of applying the electrical charge from the gun he could magnetize the steel screen and destroy the delicate balance of the directional globe.

But as long as the glass barrier remained intact the chances of that were hopeless.

He noticed then that the rumbling reverberations from the space field had ceased. The last of the huge fleet had blasted-off!

Wheeling desperately back to the screen Ward flicked the electric-arc gun on again. The edges of the glass barrier were sheathed with gleaming metal. In his excitement he hadn't noticed this before.

The blue bolt from his gun swung from the impervious glass to the metal stripping. Almost instantly the metal blackened under the withering blast and wisps of smoke drifted up from the torch-like effect of the electrical ray.

The thin wires which laterally circled the steel screen passed directly under the gleaming protective metal stripping. And Ward's heart suddenly leaped as he saw those wires begin to glow faintly as they absorbed the electrical beam from the metallic strips that protected the corners of the glass.

Would his wild plan work? If the electrical charge passing through the circling wires was sufficient to magnetize the steel screen—*If*

On that "if" hung the safety of Earth.

DESPERATE precious seconds flitted past. The glowing directional globe continued on its course of orderly irregularity.

Ward passed a trembling hand over his eyes. Was his imagination deceiving his senses? For an instant it had seemed as if the blazing orb had wavered peculiarly.

No—it was still moving on its fixed inevitable course. His eyes followed it in a concentration that was almost like hypnotism.

Right—left—left—down—

In a sudden raging despair Ward hurled the gun madly at the screen.

"Damn you!" he cried.

Almost at that same instant the directional globe stopped. There could be no doubt of it. One instant it had been moving steadily and slowly to the left upper corner of the screen—the next instant it was rigidly motionless.

Ward stared at the screen, hardly breathing.

For perhaps fifteen seconds the globe was perfectly motionless, then in a sudden erratic shift it dropped to the bottom of the screen. Its steady red glow was flickering strangely. A deep purple light appeared in its center, followed by a brilliant crimson.

Ward's fixed concentration on the screen was disrupted then by a lurid white light that broke into the room from the wide glass window.

Turning he saw that the entire atmosphere was bathed in a blaze of blinding luminence. And above the atmosphere, miles over the planet, a great awesome display of electrical forces lighted the skies with a boiling crimson light.

The glaring brightness of the illumination almost blinded him. He could see nothing above the great stretches of crimson light, but he could imagine the man-made inferno of electrical energy that circled the planet and the horrible holocaust its scorching disruption would bring about.

A fierce exultation ran through him. If that holocaust had exploded about the giant dreadnaughts there would be nothing left of them but flaky cinders floating in the void.

The light was gradually dimming. The white glare in the planet's atmosphere was fading and above, the deep crimson blaze was receding.

WARD was facing the window when he heard the metal door slide open behind him. Instinctively he dropped to the floor. The action was purely involuntary, but it saved his life—for a moment at least.

The glass window he had been facing shattered into a thousand molten pieces under a blazing bolt of electrical energy. Wheeling from his crouched position Ward saw two stocky soldiers in the doorway, guns in hand.

The expressions on the faces of the soldiers were hard to define. They both looked as if they had just witnessed the end of the world. Possibly they realized this was the end of their world.

Their eyes flicked from the dead soldier on the floor to the useless directional screen.

In that split second of carelessness Ward sprang toward the screen. A bolt of searing electricity struck his shoulder before he covered six feet.

He threw himself to the floor and rolled frantically for the cover of the desk. Another bolt seared past his temple scorching the hair of his head.

Two more charges missed him by a miraculous chance. Then his hand closed on the gun which he had thrown at the screen and he swung about firing desperately at the door.

His first shots missed badly. The two soldiers had split apart and were firing methodically at him. He tried to crawl to his feet but he discovered that he didn't have the strength. In a sitting position, gun braced in his lap with both hands, he waited for them.

Blood was streaming down his face but his eyes glinted with an indomitable spirit.

"Come and get me," he snarled.

One of the soldiers, a pure Jap, was foolish enough to try. Ward's blazing bolt cut him down before he covered half the distance.

The other soldier fired again, desperately, spasmodically—and scored two wide misses.

From outside Ward heard a sudden blasting noise.

THE sound seemed to come from a great distance. Ward realized that his senses were blurring, that he was gradually losing consciousness.

The corner of the desk cut off a view of the window hut he could tell from the confused sounds of commotion that something momentous was occurring outside.

But hefore he could force his weary arms to hring his gun into firing position the soldier wheeled from the window and raced toward the door.

Ward fired one desperate hlast at the fleeing soldier hut his aim was hadly off. He could feel his fingers numhing on the handle of the gun. A vast weariness was creeping over his body. His shoulder and head ached intolerahly where the electric-arc charges had scored hits. Even his eyes were failing. Foggy mists were swirling hefore him.

With the gun hraced on his knees he slumped hack against the wall, fighting off the oblivion of unconsciousness through sheer will.

For an interminable interval he waited there, unconscious of the passage of time. Vague sounds drifted to him, and he heard shouts and cries in the corridor outside the room.

Then his hurning, bloodshot eyes were playing tricks on him again. For through the fog of pain and weariness that was settling around him, he saw figures pressing through the door of the room, hurrying toward him.

Figures that couldn't possihly be here on this planet. In the van of the impossihle group advancing toward him was the portly figure of Commander Reynolds, the senior officer of the United Space Navy. And beside him was a slim, hlonde girl. The girl was crying openly as she sank to her knees and took his hleeding head in her arms.

"Ward," she sohhed hrokenly, "Ward."

Ward knew he must he living in some wild fancy of his imagination. This couldn't he real. But the shoulder his head rested on was real and the wet cheek against his was real.

He couldn't understand.

"Is it you, Ann?" he whispered.

THE wet cheek pressed closer to his face.

"Yes, darling, yes. Please don't talk."

Ward fought against the temptation to relax in her arms. There were things he had to know. He couldn't rest until he *knew*. With a supreme effort of will he forced open his eyes.

"Is everything all right?" he asked. His voice sounded like a whispered croak in his ears. Its weakness frightened him.

"Everything is all right now," Ann said softly. "Please believe me. All you have to do is rest for a while."

Ward shook his head weakly.

"Not yet," he whispered. "—Must know—what happened."

Another voice, a deep, heavy voice, which Ward recognized vaguely as helonging to Commander Reynolds, said.

"Better tell him, Ann. A soldier can't sleep until he knows the outcome of the battle."

Ward felt a crazy desire to laugh. The good old commander would have a proverb on his lips when he met St. Peter.

Ann's arms tightened ahout his shoulders.

"When you escaped from Exile Planetoid I knew something was wrong. I realized that you had heen right all the time. I tried to get to my ship but the hig German, who called himself the Baron, stopped me. I—I shot him and managed to get away with my ship. I returned to Earth, explained everything to the Commander, and we returned to Exile Planetoid with a full fighting force. From the inhahitants we learned of the hase on Mars. When we

(Concluded on page 110)

TIME WILL TELL

IT WAS an ordinary Friday five o'clock mob that streamed out of the A. G. Bart building on Seventh Street, and I didn't make it any different.

A tow-headed lad yelled "Huuruld! *Huuruld!*" in my ear as I rounded the corner. Susie Ann would be waiting for me in Clifton's lobby at 5:30. We always had dinner there on Fridays, then went to a movie.

"Hello, Lemuel Mason!"

I turned my head sharply.

A young fellow smiled at me, lounging against the bank, just under the gold-leaf print on the window.

"Hullo." I said uncertainly. I wasn't sure whether I had ever seen him before or not.

"Don't you remember me?" he grinned. "I met you here last year, the year before, and the year before that!"

"Yeh?" I said quizzically. "Wait a minute! Not *two* years ago—I was in Seattle then."

I scrutinized him carefully, openly.

He was tall, muscular, fair-haired, with a flawless skin that was of the perpetually tanned type. I've no doubt

Astronomers sat tensely at their telescopes, watching the doom that rushed down on Earth

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by EMIL PETAJA

Every year Morton had to return through time, and live the same year over—never to know death!

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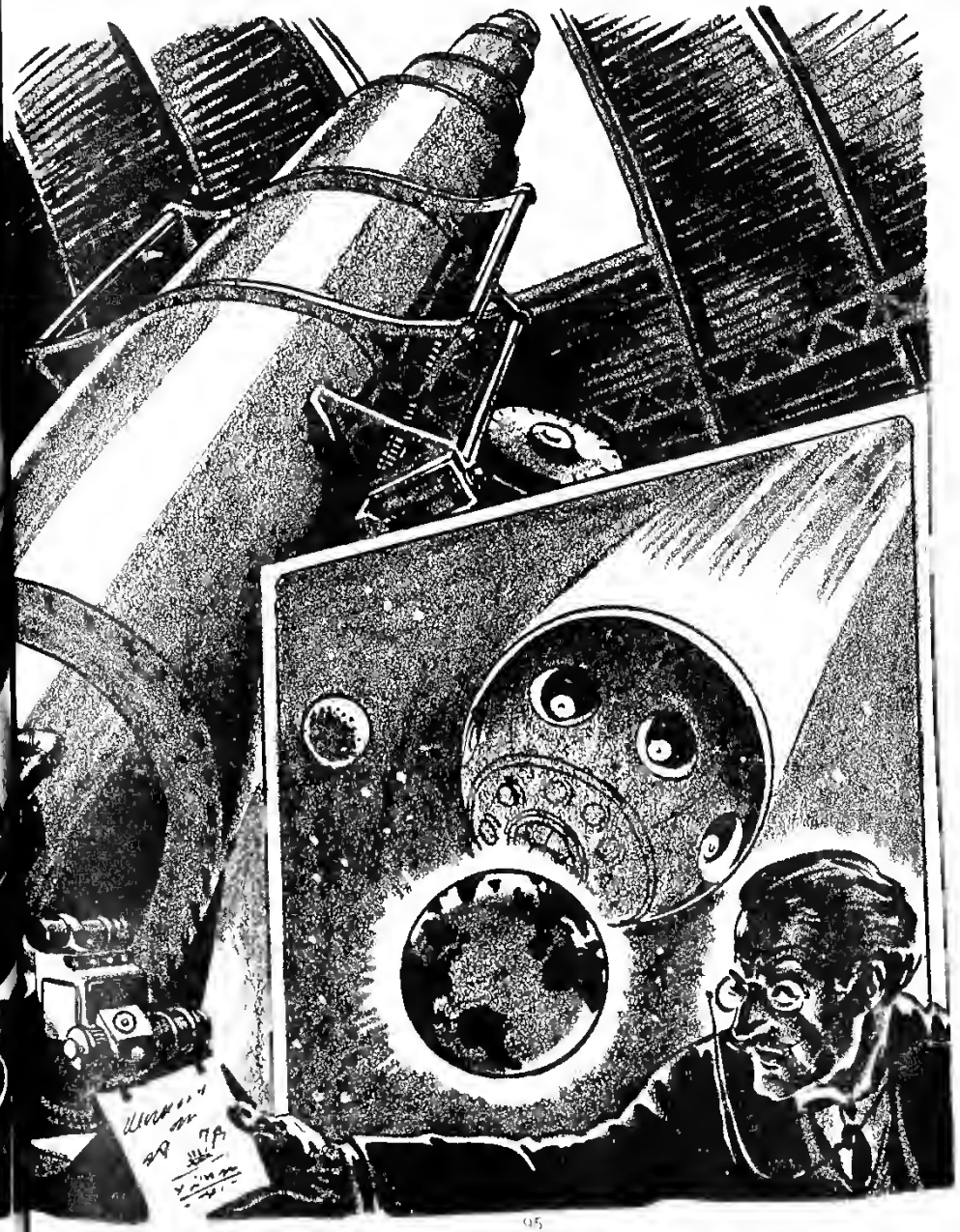

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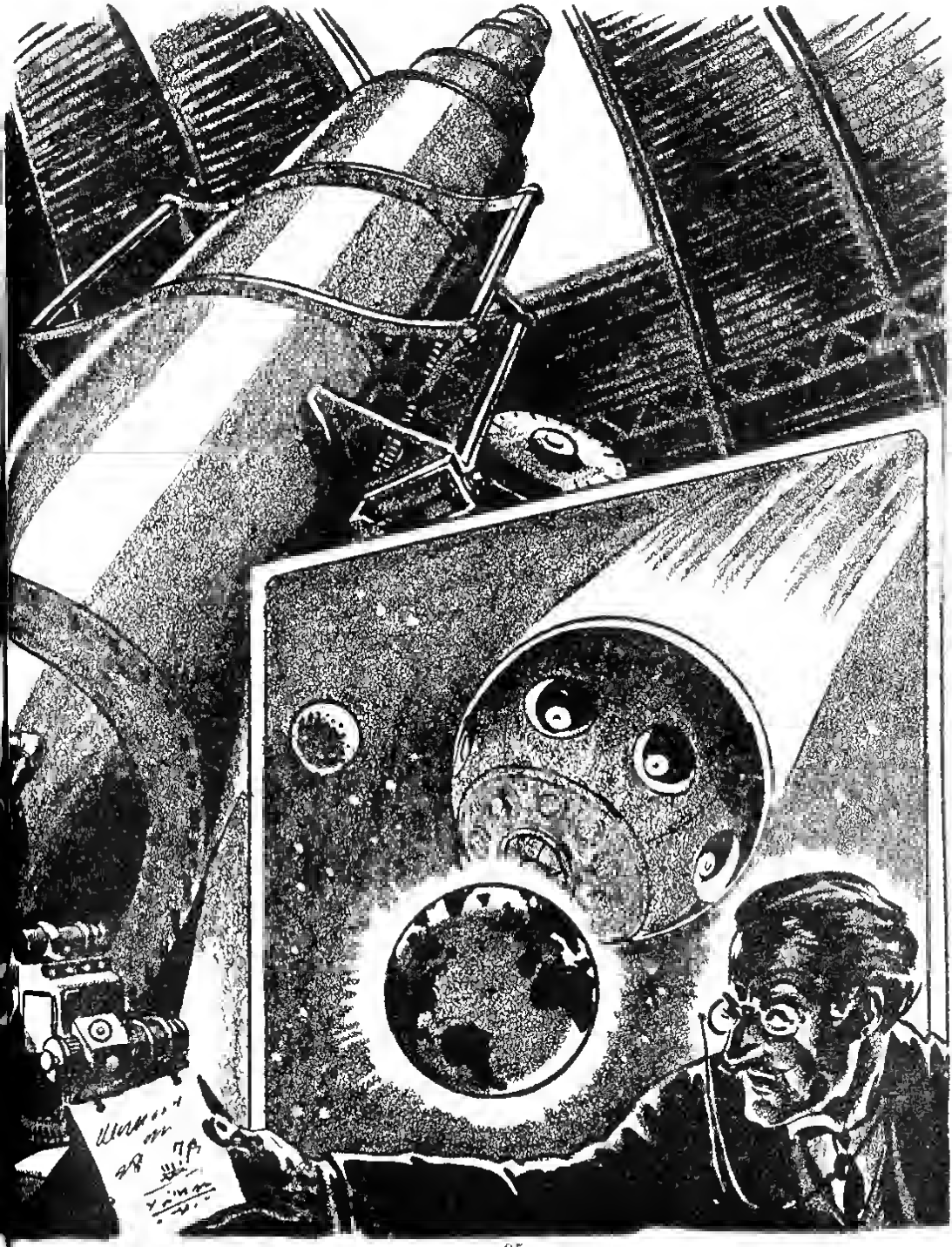


Susie Ann wishes I was like that, instead of pale, and a little hunched from brooding over a bookkeeping desk all day.

"Don't go!" he suggested easily, as I turned, on my way. "Let's have a little talk. You look highly intelligent to me."

I perked up at these words.

"Well, I'm in quite a hurry. My girl, you know."

"Just ten minutes!" he urged. "I've got a story to tell you that will pin your ears back. Not that I expect you to believe it. Nobody has yet!"

"Well," I yielded, "Sometimes I do have to wait a while for Susie Ann. The cars are so crowded."

"Sure. Hoist yourself up on this window ledge. We'll bave a little chat!"

He talked in that easy confidential manner that has you following before you hardly realize it. So I was perched upon the wide ledge with him, with the thinning crowd clicking their beels past.

"I'm Morton Weinstock," he began, by way of introduction.

"Like the famous scientist who smashes up atoms!" I exclaimed brightly. Science is quite a hobby of mine, and I follow such things in the periodicals.

"I *am* Morton Weinstock, who smashes atoms!" he snapped.

"No . . .! He's an old man."

"I'm Morton Weinstock, Junior. I also smash atoms," he went on patiently. "Do you want to hear my story?"

I nodded.

"AS YOU seem to know, my father has made remarkable advances in atomic science during the past several years. However, none quite so astounding as the discovery he and I worked over together, the bulk of which was never made public."

"What was that?"

"I'm trying to get to it," he frowned.

He looked vexed. I made as if to jump down, but be restrained me, and continued.

"I will just skim over the technical angles of this manifestation, since you seem to be in sucb an almighty hurry."

"As you like." My tone was sulky. I wanted to leave, but felt bound to hear him out.

"Einstein gave us invaluable theories regarding Time. In fact, it may be assumed that he about reduced time to a mere dimension.

"My father went a step further. He found out, by what will some day be accepted as an entirely new branch of science, that *time,* as mankind considers it, does not actually exist at all!"

"Preposterous!" I exclaimed. He frowned again.

"The best way I can give you a hint of our theory is to use similes. Take a phonograph record, for example. Call the exact point wbere the needle is playing *now*. Apparently, the *now* part of the music or speech is all that exists; actually tbe whole thing is right there. Beginning, middle section, and end. You might call the music on the record two-dimensional, to complete my simile. We are three-dimensional entities. I see this two-dimensional 'life' as one complete wbole. I have the power to jerk the needle off the first part of the record and set it down on the last part, thus interrupting the normal sequence of sound, making what ought to come a couple of minutes in the future—*now.*"

His eyes blazed. He seemed keen on this subject.

"But what are you—" I began in bewilderment.

"Just keep quiet, and listen!" was my answer. "Same with a book. The main character is born on the first page,

and dies on the last. That doesn't mean I bave to read all the trash in between to find out about it. I can skip over. To book-characters, we're super-dlmensional gods!

"Well, these are metapborical intimations of our revelation, reduced to the lowest common denominator. They will give you an inaccurate example of how this time-dlmension works. A time-dimensional being would see all our lives; the rise and fall of civilizations, as well as everyday humdrum existence, as one great pattern. He could put his finger down on any part of our Time at will!

"So, thought we, wby not penetrate this time-dimension, and by employing it transfer ourselves to some different period of our Time!"

HE CONCLUDED this statement in a tense dramatic tone, slapping my knee to emphasize each word.

"Very clever!" I said pertly. "But I believe you started out talking about atoms."

He stared at me a minute.

"It was *you* wbo started that." He went on, "Anyway, this trick of breaking up atoms is the root of our whole process of getting into this time-dimension, thus into another groove of our Time."

I buffed my fingernails on my sleeve thoughtfully.

"I read a story once, called *The Time Machine*, where—"

"Stop interrupting—please!" he said earnestly. "To attempt an explanation of our theory would probably take all night. Suffice to say that at tbe end of five years we were enougb advanced to realize that we'd struck upon perhaps the most amazing discovery ever made!

"By this time, I'm sorry to say, my father got cold feet. He began to find objections. 'This is blasphemous! I am a scientist, but we're probing too deep. To know what the future holds is God's business!' He talked like a sixteenth century monk.

"As for me, it gave me chills to imagine seeing into the future—of *living* in some distant era—and I couldn't interest myself in anything else. I had to go on!

"Followed years of scrimping and sweating, in a modest but well-equipped laboratory near the lonely wind-swept beacb some miles north of Malibu."

His steady blue eyes gazed upward, at tbe open sky above the buildings that bemmed us in. His next words were a little wistful.

"I suppose father would say I got my just desserts, finding out about the 'terror,' as they'll start calling it eight months from now . . ."

I blinked.

"*Who'll* start calling what *what?*"

"You will. Everybody on earth will," he said. "You can see what a chance I was taking, experimenting in this time-dimension, with myself as the guinea pig.

"What if I should come back in the Pleistocene Era? What if I should get snared in some foul miasma of existence? What if I was not reassembled properly, and came back a monstrosity —or remained a disembodied mess of molecules that would scatter to the four winds?"

I couldn't resist. "People would say —that's Weinstock, all over!" He paid no heed to my pun.

"THERE were innumerable earlier experiments. Finally I worked the whole thing down to the very simplest arrangement, by hypodermic injection. By shooting an Elixir into my arm, I expected to transport myself into the eternal time-dimension, and then back here—a century in the future.

"I computed my formulae meticulously. My tahulations were adjusted lnto intricate equations by advanced calculus. I consulted the stars, in much the way the early Egyptians first solved mathematlcal prohlems. I persuaded my father to check and re-check my computatlons.

"So many common sltuations tend to back up our theory. Take a movie—"

I glanced at my watch, and whistled.

"I'm golng to take a powder if you don't get down to cases," I hroke in. "I can't sit here all evening. Susle Ann is jealous already of the boss' secretary. She'll—"

"All right," he snapped. He pulled out a little leather case from his pocket, opened it. It was disappointing. Only two hottles of amher liquid, and a hypo.

"This ls it," he said, with a twisted smile. "I call it the Future Elixir, because it seems related to the old Elixirs of the Mlddle Ages."

"Why two bottles?"

"One is for transporting myself into the future; the other is for getting hack again." He evidently had expected me to figure that out myself.

"How was it one hundred years in the future?" I asked, with a slight sneer. "You did get there?"

"No," he replied, surprisingly. "I tried, but didn't get that far. After walking up and down the beach half the night in a murky fog, thinking and thinking, I finally declded to take the Elixir. It was dawn when I pushed the needle in my arm. . . .

"FIRST lt seemed as though nothing at all had happened. Everything looked exactly the same as ever. The sky, the sea, the fog. Even my shack looked the same. But when I opened the door and walked in, I saw a fine layer of dust over everything, and I knew that *something* had occurred.

"I didn't have a car there, so I flagged down a hus into Los Angeles.

"A bushy-bearded man across from me was reading a newspaper. I peered at the head-lines—black two-inch scareheads. 'WEINSTOCK GIVES THE WORLD TWO DAYS!', and underneath, in smaller print, 'SPACE TERROR LESS THAN MILLION MILES FROM EARTH. SCIENTISTS AND MULTITUDE FRANTIC!'

"I snatched the paper from him, rlght out of his hands. He muttered curses, eyeing me malevolently.

"I looked at the date first. 'April 12, 1943!' I shouted.

" 'Paper-snatcher!' shrleked the hirsute man. 'You expect today's paper! That is yesterday's. But what does lt matter; we'll all be dead tomorrow!'

"He smote his forehead with knotty fists. Then he tried to take the paper back, but I clung to it grimly, scanning the front-page news avidly.

"It was all about the 'terror.' I could quote it to you word for word. It reviewed that seven weeks previous, the ohservatory astronomers had detected a metallic ohject hurtling through space, right in the direction of Earth!

"Earth's scientists went into a huddle, with father at the head. His new theories had raised him up to the position of top scientific genius of this day.

"Their careful calculations proved that within exactly slx weeks, six days, nineteen hours and forty-nine minutes this menace out of space would strike the earth. Not squarely, hut with enough accumulated force to smash lt into lnfinitesimal meteorolds!

"Most amazing of all, certain peculiarities of the terror out of space indlcated beyond douht that lt was not any ordinary space-hody. In fact, that it was artificially propelled hy alien intelligences. The 'terror' was a gargantuan *space-ship!*

"This being true, it must be assumed that the creatures manning it were off their course. Surely they were not aiming to smash Earth deliberately! Ohviously they would smash up other planets in our universe as well, it was so incalculahly huge. Many hundred times the size of earth. . . .

"SO HERE I was, *one year in the future,* at the possible end of the world! It flashed to my mind that the reason I didn't reach my mark of one-hundred years ahead was because at that time there wouldn't he any world here. Whatever forces governed this time-dimension had let me off at the last stop . . ."

"Well, what d'ya know!" was my aghast comment.

He frowned me into silence.

"I had hut one day left!

"I rushed home. My mother's attitude toward me was one of mingled awe and commiseration. It seemed my comings and goings during the past months had kept her in a continual state of frenzy.

" 'Morton!' she cried. 'I thought you were upstairs in bed! Where have you heen?'

"I mumhled a vague answer. I knew it would be futile to attempt to explain where I'd come from. A sudden thought started my scalp prickling, as I swallowed a hasty hreakfast.

"Was there *another* Morton Weinstock Jr. upstairs in bed?

"Both the radio and my mother gave me all the latest dope on the 'terror.' Father was in conference with all the world scientists at the Observatory. I hopped into my roadster, and didn't drag my feet on the way.

" 'We must save Earth!' I told father. 'Surely there must be some way!'

"He looked as though he'd been dragged through a knot-hole. He laughed mirthlessly, glaring at me with contempt.

" 'Where'd you come from?' he rasped.

" 'I came from last year, Father!' I shouted. 'Remember that Future Elixir I was working on? Well, I took some of it last year—I mean, *this morning*—and here I am, a year in the future!'

"He only growled. After while he said impatiently. 'Don't hother me with your crack-pot notions now, son. I'm much too husy and tired to listen to your eccentricities.'

"He rubbed quivering hands over his drawn face, in a paroxysm of weariness.

" 'You've got to believe me!' I protested. 'I traveled a year into the future by means of my Elixir. Why, you started me working on it!'

"He shook his head sadly. 'I've seen it coming. You've been acting potty for a year! Not that this cataclysm isn't enough to break anyhody's mind. Lord knows thousands of persons have already been driven crazy hy this impending—'

" 'Listen to me!' I shrieked.

"But he refused to listen. He thought I was nuts, *because of my peculiar behavior in the past year!*

HE STALKED out on me, shaking his head, and the convocation of scientists repaired to the telescope room. There they goggled, and pondered, and plotted, with no tangible result until nightfall. I sidled into the vast room along with the grey-heards of every nation, and when they trouped out I peeped in the mammoth telescope.

"There it was—that silvery menace out of the depths of Space. Seeing it filled me with an intense feeling of insignificance, as well as horror. Who could they be, these voyageurs out of Infinity?

"Surely, I told myself, if they knew

Earth was inhabited. . . . If we could only send them some sort of message, telling them to swerve and avoid our universe!

"I hurst in on the grave weary-eyed circle, and hahbled my idea enthusiastically.

" 'Do you imagine that the idea of contacting the terror hasn't already occurred to us?' sneered one of them.

" 'Ruhhish!' said a couple others.

"Even my father told them I was wacky. So I left the ohservatory in hot-tempered disgust.

"Years before I had heen in contact with an enterprising young radio engineer who had constructed a superpowerful radio station, with the hope of communicating with Mars with it. I decided to follow through my idea myself, without the aid of my father and the others.

"I sought out my friend, whose radio was luckily located on the edge of Mojave Desert, less than ninety miles from town. We made the trip in record time, and worked all night long at fever pitch.

"We formulated messages of many different kinds, all warning the spaceship to swing aside. Of course we didn't expect that even though the terror got our messages they would he understood, hut we hoped to let them know that intelligent life prevailed on this particular speck in space. I was certain that if they realized this they would not destroy Earth. . . ."

HE PAUSED for hreath. Weinstock got plenty excited relating his story. As for me, I chewed off a couple fingernails listening to it.

"Well, did the terror get those messages?" I demanded, when he maintained silence for longer than I could bear.

"I don't know!" he moaned, clenching his fists. "God, why didn't I have the guts to wait, and find out?"

"What do you mean?"

"Mason, you won't be ahle to appreciate the stark pandemonium that reigned over all the world the next morning! Not until next year, when you see for yourself!"

I tried to laugh, hut choked instead.

"The nations prayed, screamed, fought, and sinned hysterically—in ecstasies of emotional upheaval.

"Scientists kept their hawk-eyes glued to the heavens religiously, in tense anticipation of doom.

"By now you could see that streaking juggernaut with the naked eye. It showed up as a glinting daytime star, appearing to get larger hy the minute. It gave no hopeful indication of having received our frantically repeated warnings.

"With less than an hour to go, I turned yellow. I, of all the people on earth, had the power to save myself—hy means of my Elixir. I could return to 1942!"

He paused again.

"And here you are!" I concluded for him, awedly.

"It's not that simple."

"No?"

"For me that was three years ago," he replied enigmatically. "I've lived three identical years since that first last Earth-hour!"

"Take it a little slower," I admonished. "What was that last remark?"

I struggled to untangle his words in my mind.

"It's like this," he explained. "I shot the return Elixir in my arm, and found myself hack on the heach in front of my little lahoratory. It was just as though I'd never left. April 13, 1942. I stood there bewildered, with the hypo in my hand, and the wind and the fog in my hair!"

"Anyway you didn't have *you* in your

hair," I muttered.

"THE next couple weeks I spent brooding and figuring things out, in my laboratory," he resumed, giving me a long scornful look. "I then decided to go back to 1943 again, quick, by means of my Elixir. I injected myself with the same potion I'd used the first time, but nothing happened! I got a little sick, but stayed right where I was!"

"Where was that?" I asked.

"In April 27, 1942!" he snapped.

"That was nearly four months ago. You didn't stay there very long!" I snapped back. I could be confusing, too. Two can play the same game.

"What I'm getting at is that I can't travel in time any more. I'm immune to the effects of the Elixir! It won't work on me any more, for some reason. I live in the normal way, day by day, until April 14, 1943, that is . . ."

I grinned.

"So if the world goes smash, you'll go with it? Just like the rest of us poor suckers!"

"No, I won't!" Weinstock scowled at my attempt to be facetious. "Keep quiet long enough for me to tell you! I live straight through until that final hour—when I first injected the return Elixir. Then, suddenly, I find myself back on the beach in April 13, 1942, again!"

"Monotonous, isn't it?" I quipped.

"Damned monotonous!" he growled. "Monotonous talking to you year after year, hearing your same stupid remarks! This makes the third August 7, 1942, I've stopped you, and told you about myself and my unprecedented predicament, and you treat the whole thing as if it was a joke! You make me sick! The whole damn pattern makes me sick!

"Here I am, trapped in a year's time! Destined to do the same things—year after year after year. . . ."

"Tell me," I put in. "If all this is really true, can't you avoid me next year? Not walk down Seventh Street, not call out my name?"

"No," he said glumly. "Don't you see, I've shifted my whole life into one narrow groove. I'm caught in between. All I can change are inconsequential details, like telling you this."

"I don't savvy." I wiped my glasses, straining to comprehend.

"I didn't expect you would. Neither do I." He sighed. "Sometimes I just have to tell somebody about the fix I'm in. Once I told a movie producer out in Hollywood about it. He laughed, and said I had a swell sense of drama."

I jumped down off my perch.

"I really have to go, Mr. Weinstock. Glad to have met you," I muttered self-consciously.

He looked forlorn. I felt I ought to call a cop, and have him hustled to a booby-hatch.

"Lucky dog!" he retorted, as I stepped away. "You'll find out whether the space terror got the radioed messages. You'll find out whether I'm a hero for having sent them, or only an ill-fated hangover from a world that's been shattered into meaningless fragments!"

SUSIE ANN was mad, to be kept waiting. She started reading me the riot-act while we nibbled our steaks, but I assured her it wasn't the boss's secretary I'd been held up by.

"It was only some time-traveller or other," I said.

"That's all right then, Lem," she crooned.

We went to the *Palace*. They had an unannounced preview that night called *Time Will Tell*. And there it all

(Concluded on page 110)

SCIENTIST

by RAYMOND Z. GALLUN

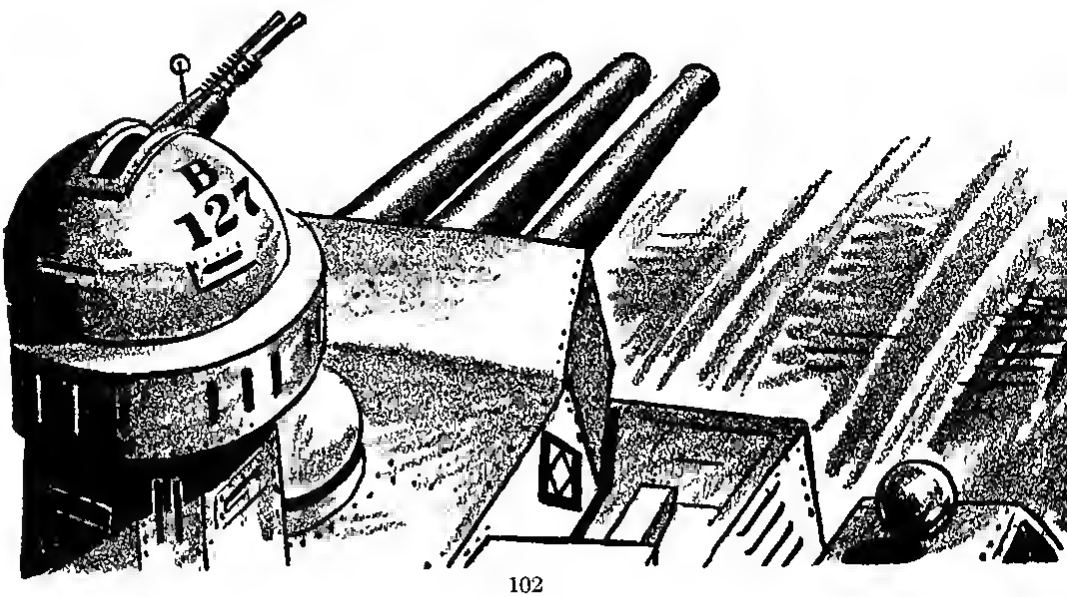
"THE funny part of it is, Prof Norfolk is a swell old guy," Frank Trasker told me quietly. "The rumors that are scaring everyone are correct, though, Arnie. It's evident that Prof has invented a weapon beyond our dreams. Artificial gravity of a concentration and power never known on Earth!"

Frank Trasker and I, Arnold Farwell, are pals. Being observers for International Newscast, we've chased plenty of wonders around the world together. But this one was by far the most fearsome. Frank's weathered face was fairly grey with awe as he spoke, the truth of his words evident before us in the blazing, Sahara sunshine.

A fighting column of armored tank-units had been wiped out there on the hillside just the day before. . . .

Frank was picturing in words just what must have happened. "No wonder everybody's afraid of the man who can do things like this, Arnie," he whispered. "Ever since the stories began to grapevine out of the desert, it's been like that. No wonder the Western European Federation sent out this army to capture Prof and his lab here at all

Norton made the greatest discovery of all time—and became Earth's outcast because it was also the foulest weapon of history



DISOWNED

The beam lashed out, and huge tanks crushed down into the soil

costs, to make the world safe from what he might try to do. Poor devils, they never had a chance! Suddenly, as the gravitational force acting on this hillside was multiplied, their weight increased maybe a thousand times, just for an instant. But imagine a man suddenly weighing 150,000 pounds! Imagine a tank of a hundred tons suddenly tugged by a force a thousand times as great! You can see how the rocks were crushed to dust and rubble by their own weight, and how steel crumpled and fairly ground itself to powder. . . ."

Frank didn't say any more about the men—the soldiers. But their flesh had fairly oozed from their skeletons, pressed through the fabric of their uniforms like a liquid. It was ghastly. The hideous event that had happened here in the Sahara yesterday, might have taken place on some gigantic dead star, whose mass and gravity are beyond conception. But that it had occurred on Earth didn't seem quite graspable.

Still, knowing Professor John Norfolk, who, years ago, had been our genial little physics lecturer at the University of Columbia, the impulse of both Frank and me was to defend his actions. Though high-strung and sometimes quick-tempered, he was one of the most big-hearted men we'd ever run across. There was only one person he didn't get along well with. That was Norman Vesper, a tall, thin-faced, caustic rival scientist. At the U. it had been talked around that in their younger days they'd had a squabble over a girl.

"These soldiers must have died a quick, easy death, Frank," I said. "Besides, they came with intent to kill or capture Prof. He had a perfect right to fight back. . . ."

"Sure," my sidekick agreed.

But we knew that somewhere on the other side of the hill was Professor John Norfolk's laboratory stronghold. And though we might have good reasons to excuse his actions, we couldn't forget the panic-breeding truth that he was the most powerful man on Earth, now. With little effort on his own part, he could destroy whole armies. No matter how philanthropic he was by nature, no one could ever relax while this condition existed.

OUR course of action was fairly clear. We were more than news-gatherers, now. We were ambassadors to the man whom the whole world could not fail to hold in fear and suspicion. We had to find out his motives, if we could.

"Come on, Frank," I urged. "Let's get started."

We left our rocket plane in the desert hollow behind us, where we had landed it. Nervously we climbed the hill, and at its crest we paused to peer ahead. Beyond a flat stretch of dunes, there was a high, rugged hill, richly fringed with palms. Fort-like walls of mud-brick, resembling those of an Arab village, loomed behind the palms. But over the ramparts peered something incongruous.

It was a flat, ebon-hued thing, supported at an angle in a glittering steel frame. If it had been silvered, instead of dead, Stygian black, I would have thought of it as a gigantic, movable mirror. Perhaps it was a mirror of sorts, not to reflect light, but to direct a concentrated beam of artificial gravity.

My blood ran cold when I saw that that nameless flat object was turning on its swivels in our direction. My guesses about the nature of the thing, seemed to be proving themselves true. And it wasn't so difficult to guess further how that armored column had been destroyed.

"Those soldiers came up the slope

we just climbed, Frank," I whispered. "But as they were doing so, the gravity beam reflected from that 'mirror' was turned on, acting right through the mass of the hill itself. The super-attractive force tried to pull the soldiers right through the rocks and sand. . . . I wonder—will Prof try to give us the same dose?"

My pal tried to put himself and me at ease on this score, by remembering something. "Prof gave me fifty bucks once," he said. "To help pay my tuition at the U. when I was almost broke."

Sure. It was all a paradox, all right. Prof, with a kindly red face that would have made Santa Claus envious. And yet this mass destruction we'd just seen. We just didn't know where we stood. But we couldn't let our nervous doubts stall us now, of course.

I took a handkerchief out of my pocket, and waved it toward the fortress en lieu of a flag of truce. Both Frank Trasker and I are big men. So we squared a foursome of husky shoulders, put on our best smiles to show that we didn't mean any harm, and continued ahead.

We didn't make more than twenty paces that way before the black mirror in its frame above those mud-brick ramparts, began to emit a low, weird hum. Or maybe it was the gigantic, unknown mechanisms attached to the mirror, that produced the sound.

NEITHER of us was given a chance even to cry out a warning. I felt a sudden, powerful tugging at my body. My feet left the ground, and I shot upward at an angle toward the crest of those frowning walls. Frank, his arms and legs gyrating helplessly in the air, was flying along beside me.

I guess we both thought for sure that we were finished. But though we were scared half to death, the gravity beam being applied to us wasn't powerful enough to give us any real discomfort in itself. And it only lasted a moment.

Over the walls, the force was gently released, and we settled without injury to the paving of an inner courtyard, where the gravity machine stood, a huge, awesome mass of dark metals.

Men moved around us—Arab workmen. And Professor Norfolk faced us as we scrambled to our feet. No, he didn't look like a fiend at all. Just a little older and more care-worn than when we'd last seen him, years before.

"I might have known it would be you two newshawks," he said gently. "I heard over the radio that you were coming here to Algeria to see me."

"Prof," I burst out, interrupting him. "The whole world's upset about you—worried that you'll try to dominate everybody, now that you've proved that you can do it!"

He nodded a little tiredly, his eyes squinting against the Sahara sunshine. "I understand their fears," he said softly. "That there's no truth in them, doesn't make any difference. It's hard to trust a man who possesses the power to override every law and military force on Earth—even though he has no intention of using it for such a purpose. . . ."

"But Prof!" I interrupted again. "How about that armored column of the Western European Federation, that you destroyed? Couldn't you have avoided killing those soldiers? It was pretty awful, wasn't it?"

He bit his lip. "I guess it was," he admitted. "I might just have increased the gravity enough to pin them to the ground and make them helpless. But various nations have been after me so long, promising, threatening. I was angry and nervous, knowing that those soldiers wanted to kill or capture me—as though I were a dangerous criminal

—when, in everything I've done I've had the good of mankind uppermost in my thoughts. I lost my bead for a moment."

He paused there. Then he went on, talking feverishly about his hopes. "Space travel is possible now—and a hundred other tbings," be said. "Why, if the gravity over the Sahara were decreased very slightly, the atmosphere over it would be of less weight. There would be rising currents of air, and winds sucked in from the oceans. Rain would fall, again, here, and the desert would be turned into a paradise of growing things. . . ."

As he talked to us thus in vibrant tones, Norfolk had a dream in his face. I couldn't belp but believe in him, then. But somehow, too, I felt that faint ghost of mistrust. Here was a man whose discoveries and inventions had made him a demigod. But you inevitably feel inferior and suspicious witb somebody like that around. Tbough his intentions seem perfectly philanthropic, there is always that certain knowledge that he could destroy you and everything you hold dear, if he just happened to feel like it—if tbe lust to assert himself was suddenly awakened.

"Why don't you just publish your discoveries, Prof?" Frank Trasker demanded. "Then there wouldn't he any secrets. Everyone would be able to do just what you can do. You wouldn't be special—separate. You'd he accepted again as something normal."

"I've thought of that often," Prof returned. "But it's no good. My invention has hundreds of untouched possibilities in war. Whichever nations developed my discovery best along such lines, would inevitably become a menace. So I've hung onto my secret, feeling that it is safer in my hands, even though it puts me in a very unhappy situation."

PROF was trapped—had become an exile of power. I realized it then more clearly than before. He, a mild little scientist, outcast because he bad soared a little above the mortal. It was one of the tragic paradoxes of life.

"There's been too many lurid radio and newspaper stories about you, Prof," Frank burst out. "Let Arnie and me take pictures of your apparatus here, for publication and telecast. Let us write up your true history, without sensationalist propaganda. It will drown out some of the scareheads that have frightened everybody into hating you. Even scientists like Norman Vesper."

Norfolk grinned briefly then, remembering his old rival and enemy—perhaps the most brilliant mind in physics, other than himself. Tall and thin and barsh.

"All right, boys," Prof said mildly. "You can take your pictures—ones that won't show too much—and tell your story about me. But I haven't much hope that it'll do any good."

Almost gleefully, Frank and I went to work, photographing gigantic coils and atomic energy power-units—things meant to generate and mold gravitational forces artificially.

But long before we were finished, we saw a rocket plane streaking far overhead. . . . Probably another prowler, sent out by the Western European Federation. Doubtless there would soon be another attempt to get Prof, for the world was a little mad with doubt.

We said goodby to our old physics lecturer, and left bis lonely desert workshop in a manner more normal than our arrival. We flew back across the Atlantic to New York, determined to soften the world's opinion of an exile. But we moved a little too slow for time.

Just as we reached the lofty landing stages of New York, the news came by

radio. The Federation, frightened to fury hy the catastrophe its first armored column had met, was making an aerial attack on Norfolk's strongbold.

Frank and I didn't spend more than an hour in New York, preparing our story, and turning our pictures over to Newscast. Then we were flying back across the ocean.

We arrived at our destination at night. A sort of vague, dry mist, like a dust cloud, hung over the desert. And when we dropped a flare, we saw only a vast crater in the ground, where the Norfolk lab had been.

"They got him," Frank croaked hoarsely. "With bombs. Blew all of his inventions out of existence."

It seemed an awful shame. My throat tightened a little, too, because I'd liked Prof plenty. But then we looked up at the desert stars, from the glassed-in cabin of our ship. Up there was something that shouldn't be. A tiny, redly luminous blob. It seemed to float thousands of miles out in space. A jagged lump, like a little moon, enveloped hy the halo of an atmosphere. A second satellite of Earth.

FRANK had an inspiration, then. He turned on our radio transmitter, and moved the selector loops of the receiver so that they would pull in any waves that might be coming from over our heads.

"Hello!" he called into the mike. "Frank Trasker speaking to Professor Norfolk. Do you hear me, Prof? Do you hear me? . . ."

His hunch was right. There was a distant crackle in the radio-speaker, mingled with the humming of vast, struggling machines, somewhere in the distance, up toward the stars. And then came Prof's voice:

"Hello, Frank. I thought perhaps you and Farwell would be coming hack toward where my lab was, as soon as you heard about the attack. But I dismissed my Arab workers, and got away just as the bombers arrived. I could have defended myself but I didn't want to cause any more deaths. So I'm taking my lab, and the hill it was built on, a little ways out into space. . . ."

I tell you it was a little blood-curdling —hearing that far-off voice stating a miracle so matter-of-factly. Frank and I looked at each other wonderingly. The crater below—it wasn't made by bombs—but by the disappearance of a whole hill into the void! Controlled gravity. Norfolk had used his vast, versatile invention to produce another wonder! It was weird, listening to the steady groan of those tremendous machines, over the radio. But tbose sounds, with their sullen suggestion of incredible strength, blotted out any disbelief that I may have felt.

"I can't talk any more now, hoys," Prof announced. "The apparatus is sputtering a little, and I've got to attend to it. Try to call me later."

His voice clicked off, but above our heads that little world he had created still glowed, defying would-be destroyers wbo, themselves, felt only that they were hattling to curb a man who had become an unpredictable danger.

"I guess there's nothing for us to do right now but go back home," Frank said.

New York proved to be a bee-hive of fears and speculations. Norfolk's latest demonstration of his wizardry only served to emphasize everyone's terror of him. It was final proof that he could do almost anything he wanted.

And they weren't done fighting him yet, by any means. "Rockets," tbe man in the street was saying. "Rockets loaded with high explosives, and sbot up there above the atmosphere, to Norfolk's hideout. We'll get him yet."

FRANK and I went to call on Norman Vesper. He was like the rest of the people—grim. Only more so, because of that old rivalry.

"If the explosive rockets don't destroy Norfolk, I will!" he told us sharply. "Those pictures you fellows took of his apparatus—they enabled me to understand his principles a bit better. . . . Yes, I suppose he might be honest, as you suggest, but with the powers he's got, I wouldn't trust Norfolk even one-tenth as far as I could see him!"

It was hopeless, of course, for us to attempt to battle down that world-wide suspicion. Men who have risen dangerously above their fellow mortals, don't belong on Earth. Frank and I recognized this probable truth ourselves, even though we admired Prof tremendously.

Three days later, they started that strange bombardment of the tiny moon Norfolk had made. Unmanned, radio-guided rockets, went shooting up from the outskirts of New York, and a score of other great cities on five continents. Eerie repulsive force, which seemed to act like reversed gravity, turned the explosive missiles aside as they approached their target. Prof was defending himself, but so far he was refusing really to fight back; and sooner or later weariness would get him, and his defense would weaken.

Frank and I tried repeatedly to call him by radio, and on the fiftb day we were at last successful.

"I'm wearing out, boys," he told us. "The projectiles keep coming so fast I have bardly a chance for more than winks of sleep."

"Tben maybe we could help you," Frank offered, after he had consulted me. "We have a plane with a sealed, high-altitude cabin. We'll fly it over New York, and you can pull us up to your moon with a strong gravity beam. We'll help you fight."

Prof didn't protest our generosity—putting our own necks in a noose. That was true evidence that he was really being ground down from lack of rest. He needed aid bad.

"Okay," he said. "And thanks a million."

Thus, on the night of that fifth day we were in our rocket ship. We felt a steady tug upward. Swiftly we and our sealed plane were pulled into space. The journey was accomplished in about two hours.

That tiny moon, circling Earth, had an atmosphere, brought up with it from below, and chained to its surface by an artificially strengthened gravity. In the warm sunshine, the palm trees still grew. We were drawn to a landing within the walls of the fortress.

PROF NORFOLK was there to meet us, looking very done out. "Thanks for coming, boys," he said again, feebly and gratefully. "And now I'll show you how to work the gravity machine, which can be used almost entirely for defense, now tbat this little moon has been jockeyed into a stable orbit. . . ."

Within half an hour, Frank and I had the defensive technique down pat. Just a matter of sighting through a small telescope, and moving some levers, whenever we saw an explosive projectile coming up from Earth. A beam of reversed gravity, leaping from that black mirror, would push the projectile aside, deflecting it from its goal.

"This ought to be fun," Frank laughed as he took over. And of course it was—at first. But as the hours went by, and the missiles kept coming, it got monotonous and nerve-wracking. We exchanged shifts, Frank and I. We slept and worked alternately, but those unmanned rockets kept coming.

Prof. Norfolk was busy almost all the time in the laboratory buildings. An outcast from Earth, his position was pretty bad. He could ride this tiny hilltop moon round and round the planet, remaining constantly the subject of dangerous pot-shots from an organized world that wanted to be rid of him for good. Or he could use the gravity machine again to take his satellite farther out into the awful depths of space, becoming forever an exile. Besides two alternatives, there was just one other.

After a couple of weeks had passed, and Prof was haggard and worn and half crazy, he hinted what this third alternative was. "I ought to teach them a lesson," he hissed at us. "I ought to destroy a few cities—pull the buildings into space. Maybe that would teach people at least to leave me alone!"

I suppose we should have jumped Prof right then. Well, we didn't. He was such a good old guy that his words came sort of as a surprise, even though we knew beforehand that he was cracking. When it finally occurred to us what we ought to do, he got into one of the buildings, and locked himself inside. A few minutes later, he had a secondary beam of gravity pulling us to the ground. Next thing we knew, we were handcuffed to a stout metal pillar in the courtyard.

"Nice kettle of fish," Frank muttered. But arguments were no good now. Prof. Norfolk didn't trust us, and we certainly didn't trust him. We had a pretty good idea that he was going to work on Earthly cities before very long.

SOME more rockets approached, and he flicked them aside expertly with his beam. But then came something that wouldn't deflect. The gravity beams pushed at it uselessly. It kept right on, straight toward us. We saw now that it wasn't a rocket at all. It was spherical, and it didn't throw out any jets, and there was an ominous lump bulging from its flank. This craft was something entirely new.

Prof was tugging and cursing over the controls of his gravity machine, but though it was still functioning perfectly, nothing resulted. That spherical ship kept approaching.

There was a radio there, beside the setup in the courtyard. We'd been using it to get news. Now it began to blare in familiar, caustic tones:

"I've got you, Norfolk, and you're helpless. You can't do a thing to me. I've found a way to neutralize your force. Those pictures of your apparatus that were published, helped tell me what I didn't know about your apparatus. I've been working on the same thing for years, and I've found the antidote at last. I've got guns trained on you now. Plain ordinary guns, but I can blast you and all your marvels to smithereens if you don't behave. . . ."

I think I felt sorrier for Prof at that moment than I had at any other. It had seemed for weeks that everything he had accomplished was for nothing. But now, as that globular craft, piloted by his oldest enemy came to a featherlight landing there in the courtyard, real defeat was apparent. Prof sagged tiredly against the controls of his machine.

The globe ship opened, and Norman Vesper stepped out, tall and gaunt and menacing. He held a pair of ray-pistols, cautiously aimed. Frank and I just stared. Seeing the final downfall of somebody big, isn't always pleasant.

And then Prof surprised us. "I guess this is just what I've been needing all the time, Norman," he said simply, the

wild, hunted light gone from his eyes. "We can be friends now. Space travel on a vast scale is going to be possible. Maybe we'll be reaching even the stars in a few years. We'll reduce the gravity of the Sahara, and bring the rains. We'll push hack the ocean here and there, and reach the rich mineral deposits at its bottom. . . ."

Vesper's stern expression softened in momentary puzzlement. Frank looked at me and I looked at him.

"What's Prof talking ahout?" I whispered hoarsely, confused.

"You dope!" Frank came back at me. "Don't you undertand? The world can't mistrust Prof any more! Because his invention is harmless, now that Vesper has found the antidote. Nohody can use gravity for destruction after this! It will have to be used to accomplish good, or not at all!"

I felt like a fool for not having figured it out for myself. The man who had become a demigod was human once more. And his banishment was over.

TIME WILL TELL

(Concluded from page 101)

was! In black and white light-shadows on a beaded screen:

Boy invents Elixir that takes him into Future. Boy saves world from space menace. Boy goes back to own Time, and rescues Girl from Villain. *Boy!*

That so-called Morton Weinstock wasn't loopy after all, I mused happily, peeling a stick of gum. He was just a prevaricating movie-fiend!

Susie Ann's sharp elbow met my rihs.

"Stop mumbling to yourself!" she whispered.

"Don't you just *love* scientifical movies!" she went on, popping her gum. "They're so relaxing!"

"Ain't they *just!*" I agreed.

I felt as though somebody'd lifted a fifty-pound chunk of ice off my head.

Just a minute! Something inside me hissed. Morton Weinstock said he'd told his story to a movie producer. This picture had been made in the past few months!

Anyway, next April 14th I can *really* relax!

Maybe . . .

THEY FORGOT TO 'REMEMBER PEARL HARBOR'

(Concluded from page 93)

were within a few thousand miles from here the electrical storm area surrounding the planet seemed to explode. That enabled us to land. There wasn't much resistance and we learned that most of the men and ships had been destroyed in the explosion just beyond the atmosphere of the planet."

The remaining soldier was suddenly visihle to Ward. He was in a position where he could see through the wide window, and Ward was arrested by the expression of incredulous fear that was stamped on the soldier's face as he stared out at the vast space landing field.

Ward's eyes closed slowly as Ann finished speaking. A vast feeling of relief crept over him. The mighty fleet of space dreadnaughts *had* heen demolished in the titanic upheaval occasioned by the disruption of the directional apparatus.

The menace to Earth was ended.

"Naturally," Commander Reynolds was coughing, "suitahle recognition of

your bravery and foresight will be made, Lieutenant Blackson."

There were dozens of things Ward wanted to say, hundreds of things he wanted to know, but for the time they were unimportant. There was also much he had to tell Commander Reynolds. That, too, could wait.

There was, however, one thing that couldn't.

He opened his eyes with an effort and looked up at Ann.

"Please don't leave me," he said.

Ann's smile was lopsided. Her eyes were wet.

"As long as you want me," she said softly.

Ward didn't answer. There are times when words are futile things, hopelessly unable to convey the feeling that is in a man's heart. This was one of those occasions.

He closed his eyes.

THE END

MEET THE HALOGEN FAMILY

By DOUGLASS WARD

JUST as humans and animals are grouped into families by their respective societies, so does chemistry set up various families of elements. Probably one of the most interesting families of all is the halogen family, consisting of fluorine, chlorine, bromine, and iodine. These elements are as alike as four brothers having similar actions, reactions, appearances, and characteristics.

The four elements vary in weight with fluorine being the lightest, chlorine next, bromine next, and iodine the heaviest. The compounds of these elements are usually white, yet in their free form each has its own distinguishing color. Iodine is a black solid and gives off a violet vapor when warmed; bromine is a volatile brown liquid; chlorine is a green gas that becomes a green liquid when subjected to heavy pressure; and fluorine is a yellow gas.

Although the four "brothers" are alike in many respects, they also have their own individuality. All of the halogens are powerful oxidizing agents, all possess an odor similar to our household disinfectants, all corrode metals, and all attack organic matter. All four combine with hydrogen to form a very strong acid.

The "bad boy" of the family is fluorine. Fluorine forms the most powerful oxidizing agent, corrodes metal the most, and forms the strongest acid. Fluorine is also the only halogen in an acid form that can affect glass. In fact, glass when submerged in hydrofluoric acid will dissolve. This makes hydrofluoric acid very useful in analyzing various types and grades of glass and in the art of etching glass. In glass etching, the glass is first covered with a coat of wax since hydrofluoric acid will not react with wax. The wax is then cut away in the same pattern that the etcher desires to remain on the glass and hydrofluoric acid is applied to etch the glass.

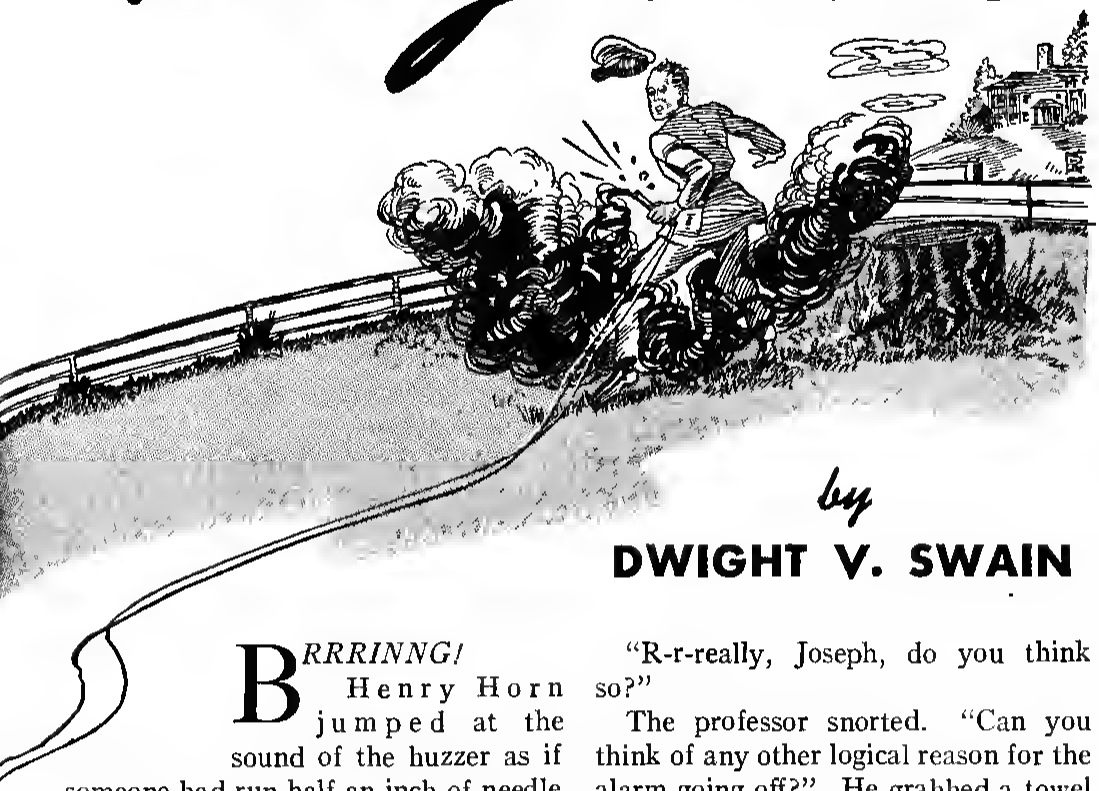
Fluorine in its free form is the most violent chemical known to science, which combines vigorously with iron and other metals at ordinary temperatures and will even attack platinum at higher temperatures.

All of the halogens have been very useful to man. Fluorine, in addition to etching glass, finds use in the aluminum industry where it acts as an agent to obtain pure aluminum from its oxide. It is also used in insecticides and as a refrigerant. Chlorine finds a great use as a purifier of water, as a bleach, and as hydrochloric acid is used in a hundred and one ways. Bromine is used as a medicine as is iodine. All in all, the halogens are indeed a very useful family to have around and man should be thankful for their "birth."

An amazing thing occurred when Henry Horn set out to invent a super-bomb. It worked, but not as expected!

Suddenly Henry Horn lunged down on the detonator handle

HENRY HORN'S *Blitz* BOMB



by

DWIGHT V. SWAIN

BRRRINNG! Henry Horn jumped at the sound of the buzzer as if someone had run half an inch of needle into a particularly sensitive portion of his scrawny anatomy. The saucer he was wiping bounced from his nervous fingers. It shattered under the sink with a resounding crash.

Professor Paulsen shot his little partner a reproving glance and straightened up from the dishpan.

"That's the laboratory buzzer!" he exclaimed, frowning. "Someone must be prowling around out there."

Henry's Adam's apple jerked up and down rapidly several times in close coordination with the spasmodic quiverings of his scraggly goatee.

"R-r-really, Joseph, do you think so?"

The professor snorted. "Can you think of any other logical reason for the alarm going off?" He grabbed a towel from the rack and hastily wiped the soapsuds from his hands. "We'll take a look right now." He hurried from the room. A moment later he was back, his ancient double-barreled shotgun in his hands.

"Come on!" he commanded.

"But we're . . . we're not done with the supper dishes yet, Joseph."

The tall scientist stopped in midstride. "Well, my intellectual atom, do you think a thief is going to wait for us to finish washing the dishes before we catch him?" he asked caustically.

"But maybe we ought to call the

sheriff," quavered Henry, his teeth chattering like a hattalion of jackhammers. "M-m-mayhe it's spies."

"Nonsense. What would spies he doing around here? I tell you, Henry, you've got to quit reading detective stories unless you can accept them as fiction instead of carrying them over to distort your outlook on life. Some petty thief simply has decided that he can pick up something of value in our laboratory. But thanks to that alarm on the front door, we'll catch him. He won't even know we know he's there until we've got him. Now come on!"

Together, the two slipped out into the night-hlackened yard of their little guinea pig farm. They tiptoed down the narrow walk separating the animal's sheds, and on toward their little brick lahoratory.

"I-I-I don't like this, Joseph. N-n-not at all. I've got a feeling something's going to happen to us."

"Sshhh!"

Someone was moving around inside the lahoratory.

"See!" whispered the professor. "He's got one of those little pocket flashes."

The faint castanetting of his partner's teeth was his only response.

"We'll sneak around to the door, Henry. Then you turn the light on and I'll cover him with the shotgun. We'll teach him to hreak into our laboratory!"

The other's goatee waggled in uncertain agreement. They crept around to the entry, Professor Paulsen in the lead. Outside the door they halted to confer.

"I'll open the door," the gaunt, gray-haired scientist instructed in a low tone. "Then you snap on the light. Ready?"

Henry gulped. "R-r-ready."

Professor Paulsen drew a deep hreath and reached for the doorknoh.

BUT his fingers never touched it. Instead, the door abruptly swung open. A stealthy figure slipped out—and collided heavily with the tall savant. The professor lost his grip on the shotgun. It fell to the ground. Too, the stranger's hat was knocked off. An oriental face—slant-eyed, flat, and with high cheek bones—leered through the semi-darkness.

"Hey!" bellowed the professor.

"Ai!" screamed the other shrilly, grappling with him.

At the cry another figure came running out of the shadowy doorway and joined the fray. Professor Paulsen gave ground rapidly. On the sidelines Henry Horn danced from one foot to the other in a tempest of panicky emotion, wavering between a natural urge to help his friend and a terrific aversion to physical combat.

One of the three struggling figures tore away from the conflict, whipped out something which glinted suspiciously like a gun, and maneuvered tensely for a chance to use it. His hack was to Henry.

The glint channeled the little man's panic into action. Breathing as hard as if he had just galloped full-tilt up a flight of stairs, he retrieved the professor's fallen shotgun. His hands locked in a death grip on the stock. Straddle-legged, he lunged stiffly forward, swinging hack the weapon like a cluh. He hrought the harrel down on the hack of the oriental's skull with all his might, eyes screwed tight shut at the moment of contact.

"Ai!" screamed his adversary.

His voice was drowned out hy the thunder of the shotgun, fired into the air hy the shock of the hlow. For a moment the dazed prowler sagged limply. Then he recovered himself sufficiently to hold himself on his feet and lurch unsteadily away. The professor's

opponent already was sprinting off into the darkness, shrilling a tremendous vocabulary of unfamiliar oaths as he fled. Panting like a Percheron with the heaves, the tall scientist watched them go, while Henry stared bug-eyed at the shotgun, still astounded at his own audacity.

Papers strewed the floor of the laboratory. Every drawer of the lone filing cabinet had been dumped out ruthlessly. But otherwise, the place was undisturbed.

Professor Paulsen scratched his gray head bewilderedly. "They must bave been searching for something. What on earth—?"

"I told you!" Henry babbled excitedly. "They were spies. Japanese spies!"

"Don't talk nonsense. There's no data here anyone—let alone a spy—would give two hoots for."

"Oh, so my invention isn't worth two hoots! Well, just let me tell you, Joseph Paulsen, my bomb is—" Henry stopped short. "Oh—!" He clamped one hand across his mouth and his eyes went wide in consternation. A little shudder ripped through his scrawny form. He clamped his eyes and teeth tight shut, every muscle rigid. Even his goatee hung at its guiltiest angle.

THERE was a moment of silence. Two moments. Three. Henry ventured to open one eye speculatively. He found himself staring straight into gaunt Professor Paulsen's arctic orbs.

"I want the trutb, do you understand?" the tall scientist grated, his voice shaking with barely controlled anger. "What have you been doing now? Answer me, you witless wonder! *What have you been doing?"*

"Eeuhhh!"

It was a strange sound. Part of it was a sharp intake of breath and part of it was shock and there was a considerable element of just plain being scared. It came from far back in Henry's throat as be leaped out of range of his friend's clutching fingers.

But a crack panzer division's onslaught was wishy-washy beside the professor's relentless advance. He cornered the trembling Henry next to the sink.

"Start talking!" he ordered savagely.

Henry made an elaborate business of cleaning his steel-rimmed spectacles. Or starting to. Because Professor Paulsen interrupted him by seizing his coat lapels and shaking him until his teeth chattered.

"I've just suffered assault by two oriental ruffians," snapped the savant, "and I'm in no mood to give you time to think up excuses. Tell me now: What do you know about it?"

His little friend swallowed hard and put on his most innocent expression.

"Why, Joseph," he exclaimed incredulously, "I always thougbt you were patriotic."

The professor gave Henry a shake that nearly skidded the steel-rimmed glasses off the end of the little man's nose. "What's my patriotism got to do with it?" he demanded stormily.

Henry wriggled free long enough to shrug superciliously. "Well, maybe *you* don't care whether the United States wins this war or not—"

"What's the war got to do with it, you misbegotten little son of Satan?"

"The war?" Henry surveyed his friend's lank figure scornfully from head to toe. Then, with the air of a teacher explaining something very elementary to an extremely stupid child, he elaborated: "Well, Joseph, you know how bad it looks for our side just as well as I do, what with Singapore captured and India threatened and the German fleet loose—"

"If you don't get to the point of all this—!"

Henry caught the glint in the professor's eye. He hastened to make placatory gestures with both hands. "All right, Joseph; I'm coming to it." His voice dropped to a hoarse whisper: "Joseph, just think how much it would mean to us if our side had the most powerful bomb in the world!"

Horror stalked across the professor's features. "You mean—?"

Henry's goatee bobbed excitedly. "Yes, Joseph! I'm working on it now! And you can see how important it must be if spies try to steal it." He sighed with all the satisfaction of a mother who has just watched her son take the presidential oath of office.

The professor stumbled across the laboratory and slumped into a chair.

"Bombs!" he muttered shakily. "Bombs. Oh, my God!"

SOMETHING of his attitude communicated itself to his partner. "Honestly, Joseph, I didn't expect anything like this to happen," he consoled. "All I was trying to do—"

"Ten years ago I retired to come out here and raise guinea pigs," the professor said sadly. "I wanted peace. I wanted quiet. I wanted to enjoy the country." He laughed. It was like a banshee's wail.

"Please, Joseph—"

"So then you had to start inventing. First it was that anti-ragweed radio wave that wiped out every peony in the township. We got sued for that."

"I still think it was a good idea, Joseph."

"Then came your 'death ray.'"

"It didn't kill anything," his colleague defended.

"But it did sterilize every single guinea pig we had. It wiped out our source of income for better than a month. And it cost us some of our best customers. When laboratories buy guinea pigs from a firm, they expect service."

"I guess," mused Henry unhappily, "that I've been sort of a problem."

"Not content with that, you had to dream up a gaseous solvent that menaced the whole state. You nearly got killed getting rid of it. You'd have thought that would teach you a lesson. But no." The professor's voice rose to a thunderous pitch. "No, Henry Horn, that wasn't enough. You kept right on inventing—one headache after another. And now it's bombs! Bombs!"

Henry sniffled miserably.

Suddenly the professor spun about. Again his eyes impaled his little partner. "How did those Nipponese nightingales know anything about you or your experiments?" he demanded.

Henry squirmed uncomfortably.

"Well?"

Quaking visibly, the other drew the evening newspaper from his coat pocket. "Maybe they saw it here," he suggested weakly, pointing to a column-long article on an inside page. "You can read it while I'm finishing the dishes." He made a bolt for the door.

Professor Paulsen intercepted him in two long strides. Gripping the protesting Henry by the nape of the neck, the savant locked the door, then turned to the newspaper.

THE story was long and eulogistic. It described in glowing terms the brilliant work for national defense being done by the country's leading scientists, Henry Horn and Professor Joseph Paulsen. They had, according to the article, developed a new explosive which would relegate the proudest achievements of Axis science to the kindergarten class. A pound of it would sink a battleship, at least. The

army definitely was interested in it and high military officials soon would arrive to make thorough-going tests.

The professor glared down at the cowering Henry. "Just where did the newspaper get this effusion?" he demanded.

A faint voice answered: "From me, Joseph."

"Did it never occur to you that it was lying to claim that the army was interested in whatever mess it is you've dreamed up?"

"But it *is* true, Joseph. Colonel Fitzpatrick's coming tomorrow."

"What!"

"Oh, yes, Joseph. Here's the letter." Henry pulled an envelope from his inside pocket. It was directed to Professor Joseph Paulsen, and the return said, "War Department, Office of the Chief of Ordnance."

The professor stared at it, then unfolded the letter.

"Colonel Arthur G. Fitzpatrick of the Ordnance Staff has been detailed to investigate the developments outlined in your communication of April 10," he read aloud. "He will arrive at your laboratory at 10 a. m. April 20, accompanied by technical aides. Please be prepared to demonstrate your discovery at that time."

Henry gaily polished his steel-rimmed glasses, worry and nervousness forgotten. "Isn't it wonderful?" he chortled. "We'll be famous and make a lot of money and not have to raise guinea pins any more, and the United States will win the war, and—and everything." He beamed like a merry, undersized gargoyle.

The professor eyed him belligerently and drummed a steady, two-fingered tattoo on the table. "I think an explanation is in order," the tall scientist declared a trifle grimly, "and it had better be good. Why is this letter addressed to me?"

Henry colored. His goatee hung at a guilty angle. "Yes," he agreed somewhat lamely, "I guess maybe I should explain." He hesitated. "Well . . . well, Joseph, you see, I'd heard you mention knowing General Whittacker when you were younger, and I got to thinking that maybe if I could let him think you were the one behind my invention, he'd pay more attention to it. . . ."

"So you forged my name to a letter to him, pretending I was the one responsible for this abortion of yours, eh? You put me in the possession of appealing to an old friend—"

"But really, Joseph, this time my invention is sure to be a success. Here, let me show you—" He drew a small, black-bound notebook from his vest pocket.

"Oh, forget it!" snapped the professor. "I don't want to hear any more about it." He sighed disgustedly. "Bombs! High explosives! Japanese spies! I don't need any crystal ball to know that you've got us signed up for one of the worst doses of trouble since Galileo went on trial."

COLONEL ARTHUR G. FITZPATRICK set down his coffee cup and said: "Yes, those two undoubtedly were Japanese spies. G-2 reports that they've been exceedingly active in this section. You needn't worry about them any more, though. I got a report just before I left that they were picked up down in Pittsburgh late last night. They confessed to breaking in here in search of the formula for your new explosive."

The colonel's aides—two perfectly groomed young lieutenants—nodded confirmation. Professor Paulsen reached for the coffee pot. Colonel Fitzpatrick halted him with a gesture.

"Excellent coffee, Professor. But no more just now. We've got work to do. Let's begin examining that new explosive."

BOOM!!!

As one, the group sprang to the nearest window. Out in the orchard, bricks sprayed skyward. Dust and debris rose in a cone suggesting a Kansas twister.

"Our barbecue pit!" gasped the professor.

"My explosive!" wailed Henry.

"Your explosive?" The tall scientist spun to face his partner. "What was it doing out in the orchard?"

Henry cringed. "I just didn't want to take any chances. You're always warning me, you know. So I put the can out there, in the pit, after I finished mixing it up yesterday afternoon."

"And what," demanded the other, "went into this devil's brew you were concocting?"

"Potassium chlorate and red phosphorus, mainly. There was some sulphur, too, and some ammonium nitrate." A look of pride suffused his face. The scraggly goatee assumed a cocky angle. "I guess you can see it was a pretty powerful explosive. There was only 50 pounds of it out there, and look what it did to our barbecue pit. And anyhow—"

Professor Paulsen and Colonel Fitzpatrick stared at each other in mute horror. The two lieutenants eyed Henry much as one would gaze at a ghost.

"You mean," choked the professor at last, "that you spent yesterday afternoon out in the laboratory, grinding up red phosphorus and potassium chlorate together?"

His friend and colleague nodded. "Yes, of course."

"Did you know that even bringing those two into contact with one another sometimes is enough to cause an explosion? And that to mix them the way you must have done is considered in scientific circles to be tantamount to suicide?"

"But—"

"It's obvious, of course," Colonel Fitzpatrick broke in abruptly, pacing up and down the room like a lion in a cage, hands locked behind him. "Mr. Horn compounded one of the most unstable mixtures it's possible to imagine. By luck, nothing happened while he was doing it. But when the sun struck that can out in your barbecue pit, the heat caused it to explode."

"And that," remarked the professor caustically, "completes the day's demonstrations. Too bad you gentlemen had your trip for nothing, Colonel."

"I don't understand," said the ordnance officer. "I was led to believe this new development was yours, Professor. Yet surely you wouldn't have lent your name to anything as unstable as a cblorate-type explosive. . . ."

"Mr. Horn is the man you want, Colonel," the professor observed firmly. "This was his idea from beginning to end, and I wouldn't think of depriving him of any of the credit."

HENRY eyed his friend petulantly over the top of bis steel-rimmed spectacles. His goatee was at its most belligerent angle.

"Really, Joseph, you don't need to be so unpleasant about it," he retorted primly. Then, addressing the colonel: "You see, Colonel Fitzpatrick, Joseph doesn't have any confidence in my invention."

"I see," said the big officer somewhat stiffly. "Well, now that we've seen your explosive in action, Mr. Horn, I believe we'd better be on our way. Gentlemen!" He clicked his heels and

bowed precisely.

"Wait!" begged Henry. "Don't go yet. I've got another explosive. It's good, too. Let me show it to you. Please, Colonel."

Colonel Fitzpatrick glanced at his watch. "Well . . . oh, hurry it up, then."

"It's over in the laboratory," Henry explained eagerly. "It won't take me but a minute to get it." He skittered across the room, then paused in the doorway. "You don't need to wait for me. You can go on out to the meadow. That's where we'll test it."

"We'll start by shooting off a charge out on that old tree stump out in the middle of the field," Henry stated five minutes later when they were all assembled on the meadow's edge. "I've got a charge all ready." He exhibited a big, tightly-corked test tube for them to see. Two wires protruded from the cork. "Electric detonating cap," he explained, and busied himself with splicing the wires to others terminating in a standard blasting machine.

"Private!" rapped Colonel Fitzpatrick.

A brisk, uniformed young man wbo had chauffeured the car in which the colonel's party came stepped forward and saluted. "Yes, sir?"

"Take that test tube out to the stump in the middle of this field. Place it there and come back."

The soldier trudged away, the test tube and detonator wires gripped gingerly but firmly in his right hand.

"Watch out!" babbled Henry in a paroxysm of worry and excitement, dancing from one foot to the other and succeeding in getting in everyone's way at once. "Don't fall! Be careful, young man!"

And then, suddenly, and without apparent cause, Henry's feet tangled with one another. He rocked backward, arms swinging wildly in all directions as he vainly sought to catch himself.

"Look out!" roared Professor Paulsen. He sprang forward.

He was too late. His little partner crashed squarely into the blasting machine. His falling body jammed down the plunger to the hilt. Horrified eyes darted from Henry to the soldier plodding toward the stump.

Pop!

THE test tube in the private's hand exploded in a great billow of low-hanging black smoke that completely swallowed the man from the waist down. It made a noise not unlike the report of a medium-sized firecracker.

"Ouch!" yelled the soldier. He followed this with some highly original interpretations of classic army profanity. The black smoke continued to hang about his legs.

Henry sat up.

"He's still there!" he gasped in amazement.

Colonel Fitzpatrick snorted like a bull in a bad mood. "Of course he's still there, sir. And from all appearances he's suffered nothing worse than a slightly burned hand. High explosive! Humph!"

Henry groped over the ground for his glasses, jarred from his nose by the fall. "It didn't work," he muttered dazedly. "It didn't work." His goatee was like a strip of wet dishrag.

Professor Paulsen helped him up. "Don't worry, Henry," he consoled. "No one can hope to have all his inventions turn out well."

"Private, what are you waiting for?" roared Colonel Fitzpatrick. "Come back here. We're leaving right now."

In a faint, somewhat strained voice the soldier replied: "I can't sir."

"What nonsense is this? I said come back. Obey my orders!"

"I'm sorry, sir. I'm stuck. That black smoke—it's caught me, sir!"

It suddenly dawned on them all that the thick black smoke indeed was clinging around the soldier's legs in a low cloud instead of dissipating. The colonel and his aides strode across the field to investigate. Henry and the professor followed.

On closer examination, they discovered that what had at first billowed forth as a cloud of black smoke now was transmuted into a beap of some inky substance. The pile was about 15 feet across. Around the soldier's legs it was waist deep, tapering off near the edges of the pile.

"I don't know wbat it is, sir, but it's certainly caught me," reported the private, panting with exertion. "It was just like tar or asphalt at first. Soft and sticky and warm. I could even move my legs a little. But in a few seconds it got hard like it is now."

One of the colonel's aides prodded the pile with his toe. It was like rock.

"How am I going to get out of tbis, sir?" the soldier inquired anxiously.

"I don't understand it," muttered Henry. "It never did this before. It just blew up."

PROFESSOR PAULSEN eyed him thoughtfully. "What'd you put into that concoction of yours, Henry?" he probed.

His partner pulled out the familiar little black notehook, paged through it, then handed it over to the professor. "There. On that page."

The scientist studied it for a moment. "So! Ammonium nitrate, eh?" He closed the notebook. "I think I see the answer, Henry. One of your formula's major ingredients is ammonium nitrate. That's a substance quite commonly used in explosives. But its value is limited by its deliquescent tendencies; it absorbs so much moisture from the air that explosives using it deteriorate rapidly. If we'd tried out your explosive rigbt after you made it, it would have proved much more powerful. As it stands, it reacts to detonation in some outlandish fashion that forms the suhstance around the legs of our friend, here."

"But if I made up a fresh batch—"

"No, Henry, I'm afraid your invention is worthless."

"Don't be too sure about that, Professor!"

It was Colonel Fitzpatrick. He strode up and down, again the caged lion, hands locked behind him. His eyes gleamed almost feverishly.

"Unless I'm mistaken," he asserted, "this fluke invention may prove one of the most effective weapons ever conceived. Gentlemen, it's the answer to Axis panzer divisions and the *luftwaffe!*"

Henry swallowed so bard his Adam's apple resembled a fishing cork with a 10-pound bass on the far end of the line. "You mean mayhe my invention will work out after all?" he exclaimed eagerly. "You mean—"

"Have you any more of this so-called explosive of yours?" Colonel Fitzpatrick interrupted.

"Why, yes—"

"Excellent." The officer turned to one of bis aides. "Lieutenant, you'll find a tear gas pistol in my car, complete with shells. The shells are blanks. Get them. Then go with Mr. Horn and load them with his compound."

Henry and the lieutenant hurried away.

"And now," said tbe colonel, again devoting his attention to the mired private, "we've got to see about getting this man out of bis predicament."

Tbe other young lieutenant stepped forward. "Tbere was a road gang work-

ing on the highway as we came up," he reminded. "Perhaps they'll loan us a jackhammer."

"Excellent. Find out at once."

THE lieutenant did better than merely to borrow a jackhammer; he also brought along a crew to operate it. For half an hour the brawny road workers pounded at the lava-like substance around the soldier's legs. Yet every time one of the men swore or commented harshly on the rocky material, the colonel would chuckle to himself and mutter, "Excellent, excellent." In the end it was found necessary to crack off the man's trousers in order to free him, much to the soldier's irritation.

Henry and the lieutenant detailed to assist him reported a few minutes after the private's release. Colonel Fitzpatrick, eyes alight, gripped the big tear gas gun, the shells for which now were loaded with Henry's compound.

"Now," he ordered the lieutenant, "I want you to take our car and drive down this road at about 30 miles an hour. But be prepared to crash."

"Yes, sir." The young officer strode away.

"What's he going to do, Joseph?" Henry queried inquisitively, watching the colonel over the tops of his steel-rimmed spectacles.

His partner chuckled. "Henry," he declared ruefully, "if he does what I think he's going to do, Hitler, Hirohito and Company are scheduled for a surprise tbat will make the Russian campaign look like a Sunday School picnic. But as far as I'm concerned, the main thing he's going to accomplish will be to make me eat an awful lot of crow where your invention is concerned."

The car—lieutenant at the wheel—was approaching fast now. As it neared them, Colonel Fitzpatrick swung up the tear gas gun. Then, as tbe vehicle came abreast, he fired.

Pop!

The shell struck the car's right front wheel. Instantly a cloud of low-banging dense black smoke burst forth. And the car stopped. Stopped definitely and completely. Stopped as if it had been driven into a mudhole 18 inches deep. In seconds the cloud solidified into a rocky black mass that nothing less than dynamite or hours of hard labor could dent.

"It works!" cried the colonel triumphantly. "It works! It stopped my car, and it can just as easily stop tanks. Imagine it! American light artillery using shells like these on enemy panzer divisions! American warplanes throwing 37 mm. shells loaded with this compound at enemy bombers! Gentlemen, tbis is a great day for the United States!"

Still soaring on enthusiasm's wings, the little group walked toward the laboratory.

"Well, Josepb, I guess maybe now you won't have anything to say about my inventions always being so foolisb," Henry crowed triumphantly, strutting along like a cock pheasant in mating season. "You heard Colonel Fitzpatrick say my explosive is one of the most important developments in modern warfare. Why, maybe it even will lick all those dictators. But if you'd bad your way—"

PROFESSOR PAULSEN groaned. "I was afraid it was going to be like this," he muttered half aloud. "There'll be no living with you unless you're slapped down right now. And I hope you'll understand that this hurts me more than it does you." Then, putting on his sourest expression, be glowered at the other. "Did it ever occur to you," he demanded with heavy irony,

"tbat you started out to develop a new explosive and, quite by accident, ended up with a perambulating lava bed? In other words, my dear colleague, it's not your fault that you turned up with something worth while."

They reached the flagstone walk leading to the laboratory.

"You're just jealous," sniffed Henry, adjusting his spectacles. "I'm not even going to listen to you." His goatee bristled indignantly.

The professor opened the laboratory door. "There is reputed to be a special angel," he observed darkly, "whose task it is to watch over fools, drunkards, children, and incompetent individuals who take it upon themselves to develop new explosives." He stepped inside, followed by the others.

"Good afternoon, gentlemen."

The voice was very polite, very precise, very cultured. The colonel, his aides, Henry, and the professor jerked about in surprise. Two smiling oriental gentlemen, obviously of Nipponese extraction, were facing them. Apparently they had been hiding behind the door. Each held a small but unpleasant-looking automatic pistol in his right hand.

"Please lay down tear gas gun," the one on the right directed. The young lieutenant who was carrying the weapon shot a glance to Colonel Fitzpatrick. His superior eyed the two Japs, then nodded. The lieutenant stepped over to the nearest lab bench and placed the big-barreled pistol upon it.

The colonel still was staring puzzledly at the Nipponese. "Where'd you come from?" he demanded. "I thought—"

The Japanese who had addressed them beamed like the rising sun on his nation's flag. "You thought we were captured late last night by your army's G-2 operatives?" He flicked the idea aside with a contemptuous gesture. "So sorry to disappoint you. Two of our countrymen were captured. In fact, they were ordered to allow themselves to he captured. They confessed to having tried to burglarize this place—also on orders. So your operatives relaxed their vigilance, thus making possible our return here." He squinted gloatingly at Henry and the professor. "We have heen watching experiments with interest, through field glasses. You bave really remarkable development—one of great value to our emperor's forces."

PROFESSOR PAULSEN eyed him coldly. "So just what do you expect us to do?"

"Very simple. We, of course, want all details on your formula."

"And if you don't get them?"

The spy shrugged. "We shall. There are ways—"

Henry shivered.

"You," suggested the Japanese, "will tell us. Now." He leveled the automatic straight at Henry's navel. "We should hate to be unpleasant."

"N-n-no," stuttered Henry.

The colonel and his aides breathed a sigh of relief.

"In that case—" The spy's knuckle whitened on the trigger.

Henry's goatee jerked spasmodically. His face resembled new-bleached flour. "D-d-don't!" he choked. "I'll tell."

The Japanese relaxed. "That is better." He indicated a notebook on the lah bench. "You will write formula down there, please."

"Do you realize what you're doing, Horn?" Colonel Fitzpatrick demanded. "Can't you see what it means—?"

"I guess I can see it means I get shot if I don't do the way these gentlemen want me to," snapped Henry petulantly, scribbling out instructions. "Maybe you want to die, but I certainly don't."

The spy picked up the notebook. "Very good." He bowed ceremoniously. "Good day, gentlemen. It would be inadvisable to follow us." He closed the door behind them.

The colonel's eyes glowed with contempt. "You little coward!" he sneered at Henry.

But Henry was chuckling. "I fooled 'em!" he chortled. "Just wait 'til they try to make something out of that formula."

"You mean—"

"I gave those spies the formula for baking powder biscuits."

The room exploded in a roar of laughter from everyone. Then a quiet voice said: "Very funny, gentlemen."

THEY whirled. The two Japanese again stood in the doorway.

"Did you think us such fools that we would accept your word as to that formula?" The squint eyes blinked coldly. "For our own amusement we let you think you were getting away with it. Now—we want that formula. And just to make sure we get it we shall insist that a sample be made up here and now and tested."

The silence was deafening. No one spoke. Henry looked nervously from one set face to another.

"This time," said the spy, indicating Professor Paulsen, "you will give us the information we desire."

The tall scientist laughed harshly. "Wrong again," he observed laconically.

"Oh, on the contrary." The Japanese smiled unpleasantly. "You see, I am well aware that you ordinarily would be very difficult to persuade. But in spite of the harsh manner you adopt toward your colleague, it is obvious that he means a great deal to you. So I shall kill him, slowly and unpleasantly, unless you do as I say."

The professor's face seemed to grow as gray as the laboratory's grimly wall. Lines of strain etched his face. He appeared years older.

"Your decision, sir?"

"No. My country means more to me than even my friend."

The other shrugged. "I am sorry. We shall begin by burning out your friend's eyes with sulphuric acid." He turned to his companion, sputtered something in Japanese. The other promptly holstered his automatic and selected a pipette from the equipment case. Filling it from a carboy of sulphuric acid, he approached Henry.

Wild-eyed with fear, the little man skittered away. The Nipponese's foot shot out, tripping Henry. As his quarry fell, the Jap pinned him down with one knee. The pipette centered above the little man's left eye.

"Help!" Henry screamed. "Help. Oh, Joseph—"

The professor was shaking like an aspen in a strong wind. "You win," he grated. "I can't go through with it."

The Japanese who did the talking smiled again. "I was certain you would see it our way." He barked a command to his companion, who immediately let the terrified Henry up and resumed his own place, automatic in hand, beside his chief.

"You will write down the formula, please."

Professor Paulsen did so.

"Now you will produce some of the compound."

The gray-haired savant's eyes burned like hot coals. He strode to the lab bench, the spy close behind him, and picked up a bottle of ammonia solution. Placing it in a small beaker, he took down a jar of iodine crystals and carefully mixed them into the ammonia, measuring out the exact amount on the scales at one corner of the bench. Then he began a process of refinement.

THE Japanese checked the materials and quantities against the written instructions. "Ammonia. Correct. Iodine. Correct."

Professor Paulsen shot him a glance alive with hate. His hand tremhled so that the contents of the beaker slopped over onto the bench.

"The hlotter," he ordered, voice harsh and unreal.

The spy picked up a hlotter which lay heside him on the hench and handed it to the professor. Sopping up the worst of the mess with it, the scientist tossed it hack to its former position, then carefully scoured off the hench surface with a wet rag.

Colonel Fitzpatrick and his aides exchanged tense glances.

Minutes passed in silence, save for the clink and tinkle of glassware as the professor worked. At last he straightened up.

"There," he declared dourly, "that part's done." He turned. The back of his hand struck a propped-up test tube. The tube was half full of a green liquid. Its contents streamed out onto the hench top.

The professor snorted his irritation. "Blotter," he snapped.

The colonel and two lieutenants lounged in excessively casual positions, like hair-trigger springs ready to uncoil at the slightest touch. The silence was beyond helief. Even the sound of hreathing seemed muted.

The Japanese reached for the hlotter. His fingers touched it.

Bang!

The hlotter exploded with the crash of a .45. The spy jumped sidewise like a frightened deer as it lunges for cover. His partner gave a short, involuntary scream. The muzzle of his automatic jerked and wavered.

The colonel and the two lieutenants exploded into action. Before the thunder of the explosion had died away they were grappling with the Japs. But the spies saw they were heaten if they stayed. Writhing free, they made the door and plunged out.

"Stop them!" roared Colonel Fitzpatrick. He and his men galloped after the fleeing Nipponese.

Henry ran to the laboratory door, his goatee aquiver with excitement. The spies were heading for a car parked in the lane alongside the house. It was ohvious that they would make it ahead of the pursuing officers.

In one jump Henry reached the lah bench on which the tear gas gun lay. Snatching it up, he rushed back to the door. Sighting along its harrel as best he could, he fired.

Pop!

The shell—loaded with Henry's formula—struck the door of the car just as the leading Japanese grasped the handle. Instantly the typical dense hlack smoke burst forth. It enveloped the spies' legs and midriffs like a monstrous black ballet skirt and held them like a comhination of the Iron Maiden, strait jackets, and the La Brea asphalt pits.

HENRY danced excitedly from one foot to the other, eyes alight behind his steel-rimmed glasses. His goatee assumed its most optimistic angle. "We've got them!" he cried. "We've got them!"

"We certainly have," agreed Professor Paulsen from a position behind him. The tall scientist's face once again was relaxed and serene. At the sound of his voice, Henry turned.

"How'd you do it, Joseph?" he quizzed. "It was marvelous!"

The professor chuckled. "Simple enough for anyone who knows anything ahout chemistry," he reported. "I thought of it the minute our friends out

there said we'd have to mix them up a sample of your formula. I couldn't give in easily, though; that would have made them suspicious."

"But what was it? How did it work?"

"Nitrogen iodide. It's made by adding iodine to an ammonia solution. Don't you ever try making it, though. It's one of the touchiest explosives known; a fly walking across it will set it off.

"Anyhow, the formula I wrote down was designed just to give me a chance to prepare some. All that really was necessary was the first step—mixing the stuff, spilling it, and soaking it up in that blotter. The rest was just rigamarole to give the blotter a chance to dry out enough to explode."

Henry suddenly giggled.

The professor eyed him suspiciously. "Well," he demanded, "what's so funny now?"

His little partner snickered again. "Don't you see?" he chortled. "They wanted my invention. Now they've got it, and"—he pointed a scrawny finger at the two sweating, swearing, struggling, hopelessly entrapped emissaries of Nippon—" and are they ever stuck with it!"

THE END.

SCIENCE FORECAST: THE SEEDLESS WATERMELON

MOST watermelon fans will agree that the only disadvantage an eater has is the seeds that keep slithering about. But soon even the seeds will be a thing of the past. Dr. C. Y. Wong, a well known Chinese scientist, has perfected a seedless watermelon.

Dr. Wong accomplished his seedless wonder by using a number of growth-promoting substances, including naphthalene, acetic acid, indole butyric acid, sulfanilamide, and colchicine. The chemicals were worked into a salve with lanoline and applied to the pistils of the flowers.

Degrees of seedlessness attained ranged from no seeds at all, to undersized, soft-coated remnants of seeds, to normal-sized, hard seed coats with nothing in them. Dr. Wong's melon is as large as the ordinary seed studded variety, but in some cases they are not quite as juicy.

In producing seedless plants the process calls for an abnormal growth—a growth that is so rapid that the plant is full grown before the seeds have had a chance to mature. The usual procedure is to use growth producing sprays and salves applied to unpollinated flowers. Such experiments have proved successful with such plants as tomatoes and holly berries, but up until now the watermelon has defied all of man's attempts to rid it of seeds.

YOU'RE NOT WANTED, PETER RABBIT!

EASTER wouldn't be Easter to an American boy or girl without the familiar Easter Bunny and his colored eggs. But to the sheep-herders of Australia there is no greater pest. Sheep-raising provides a great proportion of the income of Australia and the rabbit is the greatest menace to this income.

Both the rabbit and sheep eat the same food but the rabbit is more particular and so he takes the richer grass. Moreover, the rabbit eats the grass so closely that the ground is left bare and the wind sweeps away the top soil to form a huge desert.

The sheep-herders have tried every known means of eradicating this pest who has threatened their livelihood. They imported the fox but gave this up when he showed a preference for the sheep-herders' lambs and chickens. Fences also were introduced but with no success. Poisons were used but this killed useful animals as well as rabbits.

Scientists were called in and have offered a possible solution in the form of cyanogas. This is mixed with water in the rabbit's home to produce hydrocyanic acid gas, the most deadly fumigant known. Experiments are being conducted continually at great cost to eradicate the rabbit. The only compensating factor at present is that most of the cost is recovered by sales of rabbit skins and frozen rabbits to foreign markets.

NATURE'S BULLETS

By JACK WEST

Old Mother Nature can certainly blitz in the best Nazi tradition when she really turns on the "hail"

MOTHER NATURE, when in a fit of rage, can hurl missiles at the earth with enough power to go through tiled roofs, bore clean bullet-like holes through panes of glass without cracking them, and penetrate a foot and a half into the soil. Her bullets are more commonly known as hail, and the resulting fire power causes more than two hundred million dollars worth of damage throughout the world each year.

Although nature has not shown man's ingenuity in the development of destructive forces, it's done fairly well in its own quaint way of shooting hail stones at various and sundry districts throughout the world. For instance, as recent as April 22, 1940, at Paris, Texas, there was a 20-minute hailstorm, so heavy it piled stones fender-deep against automobiles, damaged homes, stores and trees for an estimated $500,000, and injured two men. At Hollis, Oklahoma, a few years ago, Mother Nature let go with both barrels and blasted away with ten thousand tons of hurtling ice for more than an hour and a half. Her "air raid" pounded an area of 200 square miles, smacked down 600,000 bushels of wheat, ruined a fruit crop, and generally shellacked the territory to the tune of $1,525,000 worth of damage. The hail lay six to eight feet deep in gulleys after the storm.

The fact that hailstones come big, tough, and powerful is literally no joking matter. In Yubsien, China, August, 1933, to be exact, hailstones weighing from 20 to 108 pounds were officially recorded. Getting closer to home, hailstones as large as croquet balls fell in Eskridge, Kansas. This makes that old yarn about hailstones as big as golf balls sound like so much kid stuff. Furthermore, when these big babies hit, they raise plenty of hell. They've been known to perforate steel roofs like they were made of so much paper. In Sioux Falls, South Dakota, in 1939, Mother Nature pelted the surrounding territory with several tons of 10 inchers weighing over 14 ounces. Steel automobile roofs were cut up into sieve-like shreds, homes blasted to the ground, and hundreds of birds killed.

When on the rampage, hail can do its share of killing. In India, where lethal hail is quite common, nature's bombs have bumped off 800 head of cattle at a whack. In the Moradabad district of India on May 1, 1888, more than 250 people were pelted to death by hail. For some reason or the other, not quite clear to meteorologists, Mother Nature has had a habit of unloosening some of her most destructive hailstorms on India.

Strangely enough most of the damage done by hail is done by pellets of ordinary size, say, about the size of a marble. Tender vegetation is particularly vulnerable to a hail bombardment. In the United States probably the heaviest losses are borne by tobacco, while in Europe, or what's left of it, the vineyards are the greatest sufferers. A single hailstorm in the tobacco-growing

districts of Connecticut in 1924 caused losses of more than a million dollars.

Hail, from the meteorologists' point of view, is as much a natural part of a thunderstorm as is rain. The main difference heing it is more likely to rain without hail than with it. Hail is of world-wide occurrence. It falls in equatorial and polar regions, though it's more common in more temperate regions. Oddly enough hail nearly always occurs in the summer. It seldom hails at night. And it only hails during a thunderstorm. When a summer thunderstorm approaches, hail is most likely to fall at the heginning of the storm, and it seldom lasts more than a few minutes.

As a rule, hail falls only over a small area compared with the path taken hy the storm as a whole. This area is a literal path through the thunderstorm and is known to scientists as a "hail hand," snaking and squirming its way along the general path of the thunderstorm; as in the case of the historic storm of July 13, 1788, which caused tremendous losses in France, and traveled northward hringing its destruction all the way to Holland. Meteorologists point to a map of the storm to demonstrate how the hail fell in two distinct parallel hands about 12 miles apart. The western band was 10 miles wide and 420 miles long, the eastern, 5 miles wide and nearly 500 miles long. Man has never created an air raid near as had.

HAIL, much to the consternation of weather experts, is often confused with plain everyday sleet and "soft hail," or a form of miniature snowhalls. Neither of these elements fall during the agricultural season as a rule, and rarely do they cause any damage. "Soft hail" is really a frozen snowhall that crumhles feehly when it hits the earth. It does little known damage. Sleet is just another name for frozen rain. It seldom has enough "fire power" to do much harm. The pellets consist of small, angular fragments of clear ice.

The true hailstone—nature's deadly steel jacketed bullet—is composed of partly ice and snow; layer upon layer, case hardened hy atmosphere. Hail is formed in the turhulent region at the front of a thundercloud, where it makes several journeys up and down hetween cold and warm levels of the atmosphere hefore plummeting to the earth. At high altitudes the hailstone emhryo is coated with snow, at lower levels with rain, which changes to ice as the stone is carried aloft during the cycle. While most of nature's hullets are approximately spherical or conical, other shapes, some amazing, are found. Once in a while the surface is encrusted with a curious crystalline growth.

In this day and age of indiscriminate homhings of a species sometimes known as human heings, it would indeed seem hizarre to hear of Mother Nature hurling explosive projectiles at an unruly world. Yet she has done just that; and she didn't wait for a war to arouse her ire. Some years ago Professor W. G. Brown of the University of Missouri told of hailstones that "on coming in contact with windows or walls or pavement exploded with a sharp report, so loud as to he mistaken for hreaking window panes or a pistol shot. As the hail fell the fragments sprang up from the ground and flew in all directions, looking like a mass of 'popping' corn on a large scale."

Scientists believe that if man ever should, hy some remote chance, learn how to create hail artificially, he would have a weapon at his disposal that would make the average air hlitz look like a tea party.

THE ENn

JUGGERNAUT

Karp loosed a bellow of laughter as the birds marched me to jail

JONES *Trucker*

by A. R. McKENZIE

Selling airplanes is a tough job, and even tougher if you are selling them to birds!

"THAT," I said to Captain Smith as the freighter, SPACE-QUEEN, wallowed through a meteor squall somewhere off barren Juno, "makes this a crisis. Just how do we stand now?"

"It's not 'we'," said Captain Smith unpleasantly. "It's your mess, Baldy. I checked with Port Terrestrial on Mars. My dough's still there—enough to cover damages done this ship on your cockeyed Quakerton campaign, plus passage money your company laid out for you and that crummy, back-model plane of yours down in the hold. Worry it out yourself." He sighed as he turned on the ship's newsceiver. "I'll sure hate to lose you, though, when we reach Mars. You made a swell second cook, Fatty."

Now as a competent salesman of atmospheric planes, and loyal to a company which persists in ignoring my true worth, I pride myself on my ability to cope with the most trying situation. I did not, therefore, reprimand Captain Smith although such terms as "Baldy" and "Fatty" are certainly not descrip-

tive of the extremely virile, howbeit large-boned specimen that I am. Besides, I had other troubles. I had just received a spacegram; one that made me listen interestedly to the newsceiver.

The newsceiver touched briefly on the renewal of hostilities at Quakerton —ignoring completely my astounding feats—then went into some drivel about antiquated radio signals being recorded from another unknown asteroid identified as Aveston.

"She's got four million inhabitants," Captain Smith said in surprise. "Radio signals, eh? A backward people without modern conveniences. A sucker market for salesmen, hey, Fatso?"

I read the spacegram again:

SPACEGRAM

From: Manager, Interplanetary Sales,
Uneek, Fliers, Inc.,
New Chicago, Earth
To: V. Parker Jones,
% Freighter SPACEQUEEN,
Enroute to Mars

Your (deleted) sales campaign on asteroid Quakerton a total flop. Crazy Quakerburgers reveal intention to use our 12-jet, hypo-magnesium powered atmospheric planes you sold them for war purposes. Entire order cancelled by Commissar Interplanetary Peace. Resultant unfavorable publicity destroying all markets. Uneek Fliers, Inc. tottering on brink of ruin. Forced to consolidate your new office of Sales Manager, Martian Division, with mine. Your old job as Glock Desert salesman on Mars available but with necessary salary readjustments downward. Suggest immediately on arrival you attempt to correct damage previously done Martian sales by your crazy Glock Desert Carnival. If you try another (deleted) unauthorized campaign, I'll strangle you dead!

Harmon T. Dee.

At times, the agility of my brain is amazing. On reading the spacegram, I had instantly decided that a few Martian sales could not surmount this crisis. An order was needed transcending even the cancelled Quakerton one.

Where was such an order possible? Aveston.

"It's okay by me," Captain Smith said. "You're the guy that'll get strangled. The cash at Port Terrestrial will carry you and your plane to Aveston. But, understand, *not* from there back to Mars. If you bull this job, too, Fat-face, you're back on as my second cook, and no fooling."

ENROUTE, I advised Harmon T. of my action. His reply was routine.

YOU'RE FIRED. THIS TIME UNCONDITIONALLY. STUDY YOUR MARKETS, YOU (DELETED)! EASIER TO SELL ICEBOXES ON PLUTO THAN AIRPLANES TO AVESTONITES. THEY—

At this point, a beamed interceptor wave blanketed all our communications. An order came through.

ATTENTION SPACEQUEEN. HEAVE TO. PREPARE TO RECEIVE DINGY FROM INTERPLANETARY POLICE PATROL. WE HAVE DOCTOR. COURAGE.

The I. P. P. men rushed aboard. Not until the doctor stopped to stare at me, then at a message he held, then again at me, this time in rage, did I realize that Mr. Joe Karp, an unscrupulous peddler of an inferior product known as the Globe Glider, had somehow escaped Quakerton where I had thoroughly out-sold him, and was again at work with Aveston, too, his objective.

"We received this anonymous mes-

sage," the doctor said. " 'Large party aboard SPACEQUEEN afflicted with swollen membranes. Rush aid. I see the large party and the swollen membranes. Bah!"

He stormed away but the damage had been done. By decelerating, we had lost precious time.

"Forward!" I thundered to Captain Smith. "Mr. Karp is now racing through the stellar night on another freighter with a certain Captain Craver who, I am suddenly remembering, was dispatched to Mars days ago for a complete line of late-model Gliders. We must reach Aveston before them. Full speed ahead!"

"I'll 'full-speed' you," Captain Smith said. "This old crate would fall apart. And don't let me catch you fooling with the controls!"

WHILE the SPACEQUEEN was circling the stratosphere of Asteroid Aveston, I studied the terrain through the glasses—a painful undertaking due to the fact that a short time before, while traveling under forced draft, the freighter had blown a portside rocket tube and, in the confusion, I had struck my right eye against a door.

"*Two* X-anthracite grams in a *one*-gram tube!" Captain Smith moaned. "I should have broken your neck. Paunchy, unless you get results here, that repair job is going to keep you paring potatoes for us a lot longer than you might think. No, I'm not landing. I couldn't blast-off without that tube and only a Martian atomic welder can fix it. You'll ride your sputter buggy down alone. How's the country look?"

Water and land were equally divided. Below us was a diminutive continent shaped amazingly like Earth's U. S. A. The Florida section was greenish, indicating trees, and was sprinkled with ugly brown specks which could indicate fire or insect damage. Squinting painfully, I could distinguish a whitish spot, suggesting a city, about where Earth's gulf city of Tampa would have been. A silvery thread, possibly a moat, separated this speck from the mainland. From a point opposite the island city, a line of jet black wound away through the green forest to reach the simulated Atlantic coast at a spot about due east.

"That's a road," Captain Smith said. "She runs from Tampa across to the east coast, cutting Florida square in balf. Hey, tbere's smoke!"

The forest thinned out about mid-Georgia and thereafter could be seen checkboard squares denoting cultivated land on which were many smoking mounds.

"Lava," Captain Smith said. "Fatso, the magna layer here is doggone close to the crust. That means diamonds, coal, oil and stuff like that'll be scarce."

But the sight of the fields had warmed my heart.

"Agriculturists," I said. "A splendid market."

There wasn't a hill worthy of the name. This, unfortunately, would place Mr. Karp's late model Gliders almost on a par with my battle-scarred Uneek. For the Glider can be manipulated satisfactorily only when it has a level solid upon which to direct its repulser rays. Lacking hills, I could not demonstrate bow vastly superior is the Uneek, depending as it does on the new hypo-magnesium rocket blasts, over rougb country.

Instinctively, then, I knew that in this campaign speed must play only a minor part. As I pondered, I was making a mental note of the black road, stretching across mid-Florida, for past experience has proven that roads, somehow, have an odd faculty of entering into my unsual sales campaigns.

I swung my glasses along that road to the east coast and my good eye dilated in horror. Protruding from the ocean, I perceived the shattered stern of a space ship.

"They've crasbed!" I said. "Poor Mr. Karp; poor Captain Craver. It's ghastly."

"Stop chuckling," Captain Smith said. "That's an old-time Jupiter cruiser—one of those giants that used untreated anthracite for fuel. From the looks, it crashed years ago."

GREATLY relieved, I continued my study. No other ship was in sight, and the only living things in evidence were birds, flying aimlessly about. It struck me then that, perhaps, Mr. Karp bad encountered difficulties en route even more serious than mine. I stepped to my trim-hodied ship, humming. At last, I was to be first on a virgin field.

"I'll he hanging around here over Florida," Captain Smith said. "And I'll have that cook's uniform laid out."

My destination was that island-city on Florida's western coast but I was scarcely in the true atmosphere hefore my rocket tubes began to sputter out globs of half-oxidized fuel. As I reached to readjust the carburation, the motors died completely.

The horrible truth struck home. I was out of hypo-mag!

I hurtled downward. As the Florida coast lines streaked for the horizons, the irregular road, buried within the dense jungle, took on a metallic luster. The island mushroomed to a fantastic city constructed around huge, vine-draped trees similar to those of the jungle. Ruhber trees. Even then, I was astounded. Here was a jungle, promising pure, native rubber—a product scarce on earth since its devastating 20th century wars.

"A fortune!" I gasped.

On the mainland, just north of the road, I glimpsed a crowd of stalk-bodied natives whose round heads were already averted as though tbey cringed from witnessing the horrible death toward which I was plunging, a brave smile on my lips.

Hordes of giant birds kept winging from my line of flight. Then, as the ground took one last leap, I saw, lined beside the road, some twelve or fourteen ghastly new pieces of metal which, though fairly screaming of faulty workmanship, were unmistakably products of Globe Glider, Inc. Leaning against a 2-ton Master truck model, I perceived a very thin gentleman.

"Mr. Joe Karp," I groaned.

Then I prepared to meet my end, still loyal to a company whicb persists in ignoring my true worth, regretting only that I must leave these child-like, ruhber-hlessed peoples at the mercy of an unscrupulous peddler of an inferior product.

I heard a click. Two wings snapped from seats beside the hood and I swooped upward to glide ahove the plain, chuckling at my pretended forgetfulness of these automatic safety devises which have heen standard equipment on atmospheric planes since gas engine days. Truthfully, my spectacular methods of gaining attention often startle even myself.

I DEBATED my landing. Soutbward, deep in the rubber tree jungle, was a swampy clearing, obviously caused by some gluttonous insect. Along the black-topped road, upon which a glob of my imperfectly carburated hypo-mag smouldered harmlessly, I saw a sign reading:

KEEP OFF. FEDERAL BANK OF AVESTON.

It was vital that I land close by. The field to the north, then. However, the

stalky natives remained, rooted to the ground, faces still averted. I swooped low, bawling orders, only to discover, instead of people, I was yelling at a sunflower field.

As I grounded my plane, a huge bird streaked from beneath the hull. I barked my shin dismounting and, being slightly nettled, chucked a stone at the bird which had, in the interval, turned to strut belligerently toward me.

I dislike inflicting hurt on any living thing and when my stone struck this bird's five-toed foot, I more than regretted my act, especially when it began screeching:

"You blithering idiot! Watch where you chuck those rocks." Suddenly, it was adjusting its glasses, beating dust from its red pants and wiping a smudge from its long, polished beak with a wing tip. "Guard!" it bowled and a dozen husky birds swooped about me. "Arrest this thing! I charge it with illegal entry, assault and battery, and intent to steal, rob and pilfer not only the Bank of Aveston but the five sacred diamonds of Pa Pog, King of all Aveston."

The speaker wore a crown. Pasted to it were five huge but artificial diamonds. I was face-to-beak with King Pog, himself. Where had he obtained the fake jewelry? It was coincidental that Mr. Karp was pushing his frail body forward.

"Late again, eh, Mr. Jones?" he said. "But in a jam as per schedule. Too bad Captain Craver's away on a refueling hop to Ceres. He'd have enjoyed this, Juggernaut."

I dislike Mr. Karp. He sells, occasionally, due to his ability to make contacts—such as giving Kings fake diamonds In countries where, because of the nearly surface magna layer, genuine articles of this type are rare—but bis persistence in applying "Juggernaut" as descriptive of a size which emphatically does not exist, is provoking. Actually, this term designates a man remarkably able to grind down opposition.

"Man, were you scared!" Mr. Karp added. "You clean forgot that junk wagon had wings, didn't you?"

"Certainly not."

"Then what's that carburetor knob doing in your hand?"

"Zowie!" King Pog said, gaping at the article I held. "She's studded with diamonds. Fatty, that's worth more'n our whole bank-road."

Not without purpose had I wrenched that knob loose.

"You should see my watch," I said. "It's actually coated—"

"Don't weaken, kingy," Mr. Karp said. "After all, we're selling fliers. Believe me, you'll bave diamond merchants in here soon peddling stuff for almost nothing. Diamonds, eh? These rattle-trap Uneeks are so bad, they got to throw in diamond accessories to keep from cheating customers. Now take a Glider—"

"Not now," King Pog said, as disgusted as I at this sidewalk sales technique. "I'm dropping the theft charges but the others stand. No screwball can chuck rocks at me!"

IN JAIL, awaiting trial, I analyzed the situation. To one less traveled, the fact that birds could talk, live in cities and employ oculists much as do humans, might have been dumbfounding. But after questioning fellow prisoners, the basic truths were quickly apparent.

Long before the bird-folk learned how to hammer signals through the Heaviside, they had been listening in on interplanetary communications and, since English is the official space language, they had naturally studied it ex-

tensively. A gregarious bird, its industries took in all necessities of life from lice powders to headache pills, plus incuhators, beak-paints, foot gloves and allied products.

Looking down on lighted, crowded streets, many advertising signs were in evidence such as:

WHY ENDURE GRAY FEATHERS?
Pantothentic Acid in New,
Handy Pill Form
A Pill a Day Makes Feathers Gay
AT ALL FIVE & TEN CARBO
STORES

High in the night sky, I saw, outlined in luminous smoke, the words: "BIBBS HASH; SAVES CASH." I frowned. This advertising was heing written by a hird, flying on its own power, and for free! Then I remembered Harmon T.'s: "Easier to sell iceboxes on Pluto."

The situation was clear. To save my company—and myself—I must wheedle a gigantic, exclusive order for airplanes from hirds. Even hefore that, I must again prove my product superior to Mr. Karp's, ordinarily a simple maneuver, hut herewith complicated as follows: (1) I was out of fuel, in jail and a Persona Non Grata both with my company and prospects. (2) Mr. Karp had made first contact, hrihed his way into favor and was already pushing his Glider hard, with a brand new line of demonstrators on which to draw.

Failing my ohjective, I could look forward only to weary hours of potato skinning under sinister Captain Smith.

My fine was fifty-thousand Carhus, and I offered a carhuretor knoh diamond in payment.

The judge frowned. "We'd have to dig up half the hank-road to make change. Pog was nuts, putting all our dough into that thing, even if it was a depression year. Boon doggling, that's what. A road, and nothing to run on it! Tell you what: the city owns a hundred acres of ruhher tree jungle down on the peninsula. She's unburnable and the Bum Bugs haven't—"

"Bum Bug?"

"You don't know a Bum Bug! Fatso, they're our higgest headache. They're hutterflies and lay eggs in the ground. When they hatch, the larvae crawl out and start eating everything in sight. You see them brown spots down south?"

"I did."

"That's Bum Bug work. Small swarms. Our soldiers ate 'em up hefore they could get far. However, seismographs reveal that the largest gang in history is hatching somewhere down there. If we can't out-eat them, they'll sweep up-state and wipe out our northern grain fields. Which means we'll starve to death. Only things that can stop 'em are us, hot lava and water. You want that hundred acres as part change?"

"Under the circumstances, no."

"Hmm. Well, we still got three tons of super-fine grade hlack rocks left from Pog's silly road stored over on the east coast."

"What is the stuff?"

The judge shrugged. "Some kind of low grade diamond we found in that wrecked space ship. Take those three tons, Fat. Actually, we've been wondering how to get 'em into the city hefore the Bugs start marching."

IN A flash, I saw my opening. Remembering the first rule of selling is to sell yourself, I advanced a perfect solution to this prohlem.

"You say those Bum Bugs are hatching in Southern Florida?"

"If you mean Flinch—the name of this state—yes."

"All right. Look: You've got a road —your hank—winding from Tampa here to the east coast through the ruhber jungle."

"It's a gulf-to-coast road, hut Tampa isn't—"

"To get into your fields those Bugs got to cross that road."

"Correct."

"So," I said, "get your hulldozers and dig a ditch right where that road is. Let in water, and you've got a canal. You'll hold the Bugs in Southern Florida."

The judge clicked his heak disgustedly. "We have no hulldozers. And if we hust that road, we're hankrupt. Besides, you go letting water in on the thin crust, and if the magna husts through—wham!—the whole country's mayhe hlown apart. I'm fining you a trillion-zillion carhus for wasting my time—which means you get just two carbos in change. Next case."

THE clerk handed me two flat, shimmering discs, ohviously coined from the road material; a suhstance which hurt my teeth and was so chemically inert that a lighted match—a crude Avestonian product—made no impression on it whatever. I went into the hall and found Mr. Karp at the water fountain, talking with King Pog.

"Seeds, berries, suet—you can't raise the stuff in the city, can you?" Mr. Karp was saying.

"No," King Pog answered. "Our dairies, farms and orchards are all in the north country."

"And how does that produce get to market?" Mr. Karp cried. "By wing power! Think what it costs you to train, feed and doctor the thousands of bird carriers you employ. Think what a fleet of fast Glider Air Trucks would save you! One man doing the work of dozens. Night and day service. Lower overhead. Now with our new Master 2-ton job—"

It was an example of Mr. Karp's unscrupulousness. Actually, the instant I had seen this country, I realized it was not a pleasure craft market, but one soley for air trucks like the powerful 2½-ton Uneek Peerless. Dozens, hundreds, thousands of Uneek trucks—orders enough to holster Uneek's tottering finances, commissions from which I could repay Captain Smith, and husiness so promising that Harmon T. would immediately turn the Martian office back to its rightful owner, me.

Mr. Karp, ohviously, had stolen my sales plan.

"My idea, originally," I said, cleverly entering the conversation. "But employing a 2½-ton Uneek—which not only has a ½-ton greater capacity than its closest rival but is powered hy inexpensive, high-octaned hypo-magnesium; an exploding fuel which keeps the driver awake and prevents accidents such as are often encountered amongst silent hut inferior products. Further, all Uneeks come equipped with diamond-studded accessories and can negotiate mountains with—"

"You," said King Pog, "are standing on my sore foot. You are also fatter than I thought. Aveston has no mountains and your diamonds are as phony as Mr. Karp's. Furthermore, you have only an old-model sedan which is without fuel. However, I still intend to be fair. On the east coast, right where that spaceship crashed, we have three tons of super-fine—"

A messenger hird came shrieking up the hall.

"Pog! The Bum Bugs! Thousands, millions. They've hroken earth downstate. Coming north, eating like mad through the rubber tree swamps. Guy figures they'll reach the hank-road in four hours. Three more, and they're in

our grain fields and we're goners!"

KING POG came down, screaming, "Call out the eaters! Every cock, hen and fledgling. Race south. Eat like you never ate before. Try to start fires. To eat, and don't forget your crop pumps."

"But, Mr. Pog," I said, "you're forgetting that order for a fleet of Uneek's Peerless 2½-ton—"

"You—" Pog said shrilly.

"Ignore him, kingy," Mr. Karp said. "It's a 2-ton Glider—"

King Pog was tremhling. "Will you two ninnies get this: if we can't out-eat those Bugs, we won't have any grain to haul. If we don't have grain, we can't live. And if we aren't living, how in—" His voice hroke. "I said I'd he fair. There's three ton of loose super-fine on the east coast. The first one of you mutts that lays a bird-sized load of those rocks on the city hall steps gets the orders. That is, if we stop the hugs, if we save our fields, if we're still living—"

And as he sped away, crop pump in foot, I heard Mr. Karp chuckle, "No fuel. And it's easy a hundred miles if you follow that crazy road. Juggy, you figure you'll be ahle to hand-carry a ton of that stuff in ahead of me'n the Bugs?"

I frowned.

"Are you ever stuck!" Mr. Karp gloated. "Even with fuel, your pleasure sedan couldn't lift fat you and a ton four feet. Empty tank—fuel reserve all gone—" He looked at my face and suddenly wailed, "You still got a reserve! You forgot you had one—like those wings!"

I trotted for the hridge, grinning at Mr. Karp's stupidity. That a man, thoroughly familiar with his product, should forget, even in a crisis, that every Uneek had reserves of special douhle-hypoed magnesium for just such emergencies was ridiculous.

BY THE time I had found the valve, Mr. Karp was high over the ruhher tree jungle, streaking east in his 2-ton Master truck. Following, I could see the Avestonites winging south to eat to the death against the Bum Bugs. Below, the winding, hlack hank-road shimmered glassily under the glare of falling, white-hot glohs of faultily oxidized douhle-hypoed magnesium. Having removed the knoh, I was unahle to adjust the carhuration and the hurning halls continued to drop, bouncing off the inert hank-road to hurn themselves out upon the swampy ground heneath the almost fireproof ruhber trees.

Unless checked, the larvae hordes would soon be wriggling past this point into the vital grain fields. Only Avestonites, heat and water could stop them. I could see the hird-people, armed with torches, futilely attempting to turn the hordes towards water.

Reaching the coast, opposite the wrecked Jupiter flier, I found Mr. Karp, two tons of the colorless rocks already loaded.

"I had to wait," he said. "Had to see how a sedan's going to lift a ton-plus ahove these trees. You'll be lucky to rise four feet."

He was wrong, as usual. With all rockets flaming, I rose to an altitude exceeding five feet. Then, huried to the neck in my load, I set my agile hrain to work.

I could not rise ahove the trees. Two attempts proved a straight-line flight through the dense jungle was impossihle. Only one other avenue was open. The road, built of the stuff I was trucking, the monetary hase of a people who revered diamonds, owned a fortune in ruhher and fought ravaging Bum Bugs.

"Unhappy voyage," Mr. Karp said

as his truck went sluggishly upward and started a low, line flight west towards a gold mine of orders.

Promptly, the jungle beneath him went mad. Trees pitched, branches splintered, leaves went swirling. Mr. Karp's Glider leaped about accordingly, and he barely made the safety of the road along which I was already flying, spurred on by an unappreciated desire to give my all for my company even though defeat seemed inevitable.*

TOGETHER, then, we raced along the twisting road—I at a five-foot level; Mr. Karp at twenty—just below the overhanging foliage. It was quickly apparent, however, that in spite of my overload, Mr. Karp would be compelled to drive his truck at top speed to maintain a lead. Since even a spaceship can fail at continuous top speed—as I had painfully discovered—my arch enemy concocted a fiendish plan. Creeping by above, he concentrated his lifting repulsers on the road directly in front of me, then beamed his propelling rays backward upon my flier's nose, and abruptly I found myself in dire straits indeed.

The weighty propelling shafts, added to my overload, forced me down to a point scant inches from the bank-road. My faulty oxidized double-hypoed blasts were gouging deep into its inert surface. Realizing my danger, I increased my speed only to discover that, should I continue, the added weight of Mr. Karp's lifting repulsers, now stretched curtain-like before me, would certainly have born me the remaining distance into the road to a possible crack-up.

The pocket completed, Mr. Karp throttled down. His strategy was obvious. With my higher-geared Uneek safely bottled, he could now maintain a safe cruising speed. Near the finish line, he would simply open up and win, going away.

"A crisis," I thought.

Time and again, I nosed into that invisible force curtain only to desist as I felt my hull actually graze the road's surface.

The last curve neared. I saw movement on the south curb. Bum Bugs. Millions, eating relentlessly in. The Avestonites, obviously, had eaten a lost fight. Barring a miracle, the Bugs would soon be across into the grain fields to doom not only the bird-men but whatever hopes, if any, I still had of concluding a successful sales campaign upon which rested not only the fate of my company but my future as well.

I THOUGHT of the weary hours of potato undressing ahead of me. I thought of crafty Mr. Karp who would go blithely on, orders or no orders, forcing his inferior product upon trusting peoples for he, I regret to say, is employed by a company far more considerate of its employees' efforts, than mine.

It made me mad. I reached for the motor switch. I split it. Every rocket went dead. My Uneek thundered down upon the road to stop dead at the end of a long, screeching skid. As I had hoped, there was violent action above me. Mr. Karp's propelling rays had leaped from my ship to the road. The

* Mr. Karp's trouble was elementary. In a repulser-ray type ship, tonnage is proportioned equally amongst the myriads of driving and lifting rays. Ordinarily, even a Glider may pass above crowded cities without causing damage because the angling rays, each bearing but ounces of pressure, strike the ground far apart. Here, however, Mr. Karp's low flight and over-load had concentrated the weight upon a restricted area. Five, even ten weighty beams would stab upon a single tree limb, breaking it down, causing the Glider to dip since, naturally, the shock-absorbing qualities had lessened mathematically in proportion to each ounce of added weight.—Ed.

truck lunged backward as though striking a deep rut. Its nose went high; it took a weird half roll. I could see Mr. Karp, fighting his complicated controls. The adjacent jungle shuddered as stablizing rays shot every which way.

I cut back power and went thundering forward beneath the distressed carrier. It pitched insanely as its rays were once more crashed out of focus. Twice, I felt my hull being driven against the road. Then I was past, streaking around the curve, to see the smouldering ruins of the bridge, leading to the Avestonites' citadel.

I WAS undisturbed. My jaw was set. I had a job to do. To deliver my load to the city hall. And worms, water or Mr. Karp could not stop me now. Knowing no reward could possibly be forthcoming, it was with a spirit of reckless bravado that I sent my indomitable flier speeding across the moat.

Flocks of bloated Avestonites were winging in from the south. Other birds, already home, were collected at the city hall, and, as I hove into sight, wings started flapping encouragement. Though their battle was lost, these stalwarts were forgetting their sorrow to cheer a fellow fighter on to victory. Drawing nearer, I saw every birdish face twisted into expressions of hysterical glee. I responded with modest bows.

Empty as would be my victory, it was nevertheless gratifying to realize that, at long last, my ability to defeat my bitterest rival, Mr. Joe Karp, was being appreciated by someone.

But where was Mr. Karp?

For the first time in my exhaustive ride, I looked back, and then I knew why the Avestonites had swarmed to meet me, and why King Pog, himself, stood ahead on the city hall steps, his wings beating even more frenziedly than his subjects.

In humans, extreme joy and insane rage are emotions hard to distinguish between. In birds, it is even more difficult. I was not being cheered. I was being hated. Violently.

Quite as suddenly, I knew the load I carried. Anthracite. Hard coal. Inert to a match flame, but easily set to a long oxidizing process by the heat of double-hypoed magnesium. Hard coal, used to power the ancient Jupiter liner and treasured by the Avestonites because their world, cursed by the closely-surfaced magna layer, knew as little of this carbon compound as it did of the pure product, diamond. Untreated anthracite, so valuable as to have become a basis of currency, even though it had been boon doggled into a worthless road.

Native hard coal, unrecognizable to one who had had experience—unfortunately—only with treated X-anthracitic grams being used today as spaceship fuel.

My poorly oxidized double-hypoed magnesium blasts had fired the entire Federal Bank of Aveston. Thousands of irreplaceable tons of coal were now burning upon the Aveston state I had dubbed Florida.

MR. KARP, I saw, would not finish the race. He remained far back, battling to maintain flight over the northern rubber tree forest where my daring maneuver, and the intense heat, had driven him.

Once again, I had proven the worth of my product over that of its closest competitor, but in doing so I had instigated the complete and final collapse of my prospective clientele's carbon monetary system.

I dumped my load of coal and, evading the maniacal charge of the bank-

rupted citizenry, I dropped my watch, the case of which held two small but genuine diamonds, as payment for the loss I had caused these bug-plagued peoples, and then went streaking upward to my rendezvous with the SPACEQUEEN.

The cook's uniform was waiting. However, weary as I was, I must state emphatically that the spacegram I received about the 976th potato was in no way the surprise Captain Smith insists it was.

The spacegram was from my immediate superior, one Harmon T. Dee, Manager of Interplanetary Sales, Uneek Fliers, Inc., and it read:

You (deleted) bonehead. Burning coal-road stopped Bum Bugs. Grain fields saved. Aveston thrown off carbon-compound standard by influx of diomond merchonts. Road was worthless. Birds now on rubber stondard. King Pog returning remoins of your watch. Hos appointed you honorary colonel of Chompion Eoters Squad. Uneek Fliers deluged with orders. Moin foctory now feoturing new 3-ton, 40-jet, heavy-duty air truck. Mr. Karp lost seen crashing out of control in northern Forest Area. Office of Sales Manoger, Mortian Division, reopened ond ovoilable to you with salary readjustments upword . . . Oh, you great, big, gorgeous (deleted)!

Harmon T.

CATALYST FOR POWER!

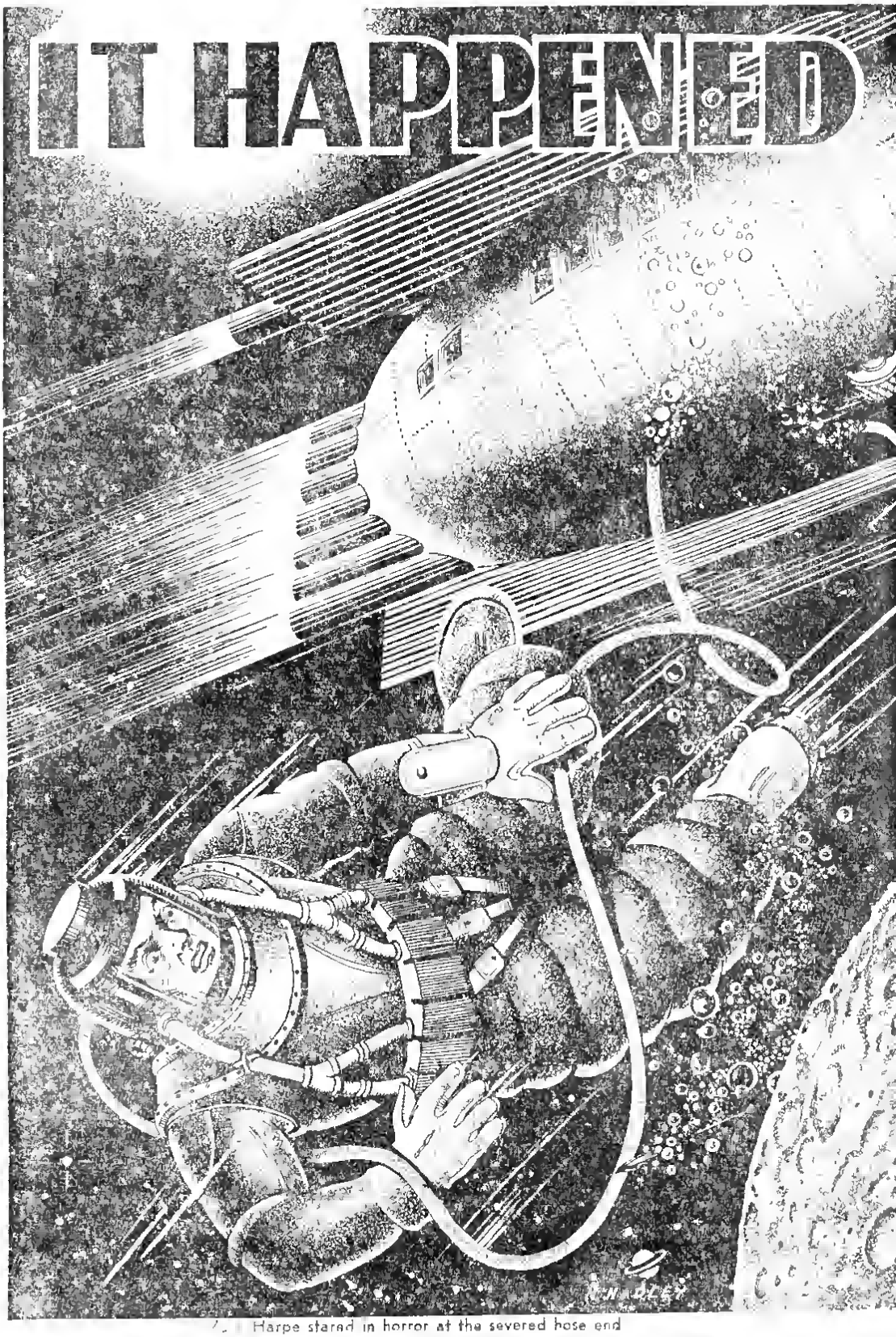
By ROLAND BIRCHLY

THE possibility of gasoline rationing for civilian use and even a threatened shortage for military use has caused scientists to look around for methods to increase the gasoline yield from crude petroleum. Latest reports indicate that the work has progressed very rapidly and successfully so that now it might be possible, not only to get a high gasoline output but also a higher octane gasoline from crude petroleum.

One of the newer fuels produced will sell for less than our premium brands now sell for and will be of a better quality. It can be produced from tar, asphalt, and from the "left-overs" in producing gasoline under the old methods. This greater gasoline output has been made possible by the discovery that aluminum silicate will act as a catalyst to crack crude petroleum into gasoline. The presence of the catalyst enables the crude petroleum to be cracked at a lower temperature with about $\frac{1}{50}$ of the pressure needed under present day methods. Not only does the catalyst produce more gasoline but also a gasoline with an eighty octane rating, which is equal to premium gasoline. This gasoline is being used to produce 100 octane gas that is needed by airplane engines. This was indeed good news for our Army and Navy, who were threatened with a possible gasoline shortage for their air forces.

This new process also will have a deep significance for the automobile industry once this war is won. For years the automotive engineers have been hampered in their development of efficient, high compression engines since the average gas available would detonate too quickly and the small supply of high octane gas was too expensive. With this new discovery, the automotive engineers will have a wide open field in developing high compression engines knowing that the necessary fuel will be within the reach of "Mr. Average Man's" purse.

IT HAPPENED



Harpe stared in horror at the severed hose end

By MANLY WADE WELLMAN

Zack Harpe faced terrible death as he drifted slowly into the void, his air hose severed. . .

THIS couldn't be curtains, he thought as he somersaulted over and over through nothingness—not curtains for him, not for Zack Harpe! Why, he'd been beating fate ever since he was a kid pilot in the Venusian War, and not all Venus had been able to kill him, with bombs or rays or—Floundering in the empty sky, his highest-riding sense was of disbelief that anyone was killing him. But somebody was.

His lungs labored inside his space-helmet. Air going. One gauntlet grabbed the air-hose trailing behind, drew the severed end into view. Cut off—who did that? Zack Harpe checked evidence, as expertly as though he sat

safe at this rocket controls. Plessner—first mate, capable, apparently trustworthy—Plessner had reported a leaky seam in the ship's plating. Captain Zack Harpe, putting on a space-overall, had accompanied Plessner to the lock-panel for a survey. Being Skipper, he'd gone first. And then—

It was Plessner who kicked him loose, undoubtedly. A mighty kick, just after slashing the air-hose loose from the oxygen tank. Harpe looked back inside his glassite helmet—far off sped the silver cigar that was his lost ship, dwindling at a speed of miles to the second. He was done for. He'd die for lack of air, and float forever—become a space-vampire, if you could believe the legends of the rocket hands—a wandering corpse with a devil inside it, seeking vengeance on civilization. . . .

No! He told himself fiercely, and, taxing his brawny gloved fingers, tied a knot in the cut hose. That would keep some minutes' supply of oxygen inside his suit. He also tied the bleeding tube-end that jutted from his oxygen tank behind his shoulders. Now, where in space was he?

It took fully a second to remember; they'd been sliding Earthward from Jupiter, had crossed the hand of asteroids, were approaching the orbit of Mars. But Mars was in opposition, the other side of that burning blinding penny that was the sun out yonder; well, then the Space-Station was at hand. Yes, the litle artificial world that Spaceways, Inc., had set opposite Mars as a refueling stop for ships who traveled that way to the outer worlds.

Harpe squinted hard. Sunward, hard to see against the glare, showed something—the Space-Station, as near as that. Harpe smiled to himself, his rugged dark face turning fiercely triumphant inside the helmet. Plessner had cut the air-hose to kill him—that cutting gave him transportation to safety.

Writhing and shifting weight, Harpe pointed his helmet in the direction of the swiftly approaching Space-Station. Then, jerking open the end of hose connected to his oxygen tank, he turned it footward. Its gush served as a very feeble rocket-blast, kicking along the few ounces he weighed here in mid-space. "I'll get out of this," he assured himself. "And, before a big string of days, Mister Plessner will wish that—"

HE LEFT the wishing to Plessner, and tried to ration his breathing even more slimly. The few cubic feet of air inside his overall had gone foul. He gazed at the expanding Space-Station toward which he slid. It was like a caricature of the planet Saturn, a central sphere to house storerooms and living quarters for the station keeper, and a great disklike collar for landing port. And—yes, surely—a moving figure approached the lip of that circular metal deck, as though watching the approach of the castaway. Gasping, yearning for a whiff of the fresh oxygen that wafted him along, Harpe drove himself closer.

Sense of direction returned to him. The Space-Station wasn't out there but down there—it had involved him in the light bonds of its gravity. He settled down on the expanse of landing deck, like a feather drifting to a floor. The figure, in space-overall and glassite helmet like himself, moved close as if to greet him.

Harpe's sides throbbed with the labor of his heart, his lungs choked and drowned. He sprawled on the metal surface, unable to move. The other man walked close on clanging magnetic boots. One of those boots touched toe to Harpe's metal helmet-collar, closing

a circuit of sound conducting. There came to Harpe's humming ears a voice, deep and sardonic:

"Mr. Manfred Plessner, I suppose?"

Harpe summoned his last vestige of strength. "Help!" was all he could wheeze in reply.

The helmet stooped above him. "Ah," said the deep voice, "a cut air-hose, a distressed manner—very clever, Mr. Manfred Plessner! And I'm to save you, am I? Well, why not?"

Big arms gathered Harpe like a bundle. Then no more sight, no more sound. . . .

Waterfalls dinned against his eardrums, wakening him. Harpe gulped down welcome air. He stretched his arms, lifted his head, opened his eyes.

He lay on a pallet in a cabin bulkheaded with dull utilitarian metal. On hooks hung sheafs of reports. There were filing cabinets, a businesslike desk—this would be the Space-Station's main office. Beside him loomed his huge rescuer, still in space-overall but with helmet unshipped. Harpe, who was not small, knew that this man was a giant beside him—six feet four, say two hundred and fifty pounds at home on Earth. The face that tilted to study him was broad and heavy, with deep lines at brow, eye-corners, around the mouth. The brow was as high and hard as a cliff, the chin like a cube of granite, the eyes full of raw gray lights. Abundant white hair framed this strong mocking countenance.

"Feel better, Plessner?" inquired the giant.

Harpe managed to sit up, though his head still drummed. His space-overall had been peeled off, chucked into a corner. "What's this about?" he croaked. "Why do you call me Plessner? It was a man named Plessner who kicked me out of my own ship into space—"

"Oh, save that clever story," interrupted the other roughly. "It won't wash, Plessner. I'm Jan Conniston."

A pause, as if that name should tell Harpe something; then a sneering smile. "You simulate stupid mystification very well, Plessner. It seems that I'm to have a very talented and interesting son-in-law."

THAT statement gave Harpe strength enough to get to his feet. He still breathed hard, but his head was clear and he stood up straight, not so very much shorter than the man who called himself Jan Conniston. His shoulders, too, were nearly as broad as that monstrous bulk. His own face, getting back some of its color, scowled.

"What's the clowning for?" he demanded. "You saved my life—surely not to play some silly joke. You keep calling me Plessner. Well; I'm Captain Zack Harpe, of—"

The massive shoulders of Conniston shrugged away the protest.

"You're wasting your breath, Plessner. I know that my daughter Vannie was talking to you on the radio, just two hours ago." He jerked his head at a wall-radio. "I rigged up that extension because I suspected funny business going on. You told her you'd come here soon, with a trick to put me off guard so that you could carry her off—and I've been waiting . . ."

Two hours ago. Plessner had had the radio trick, had been QSOing someone. He, Harpe, had paid no attention then—now he stuck evidence together. Plessner had fallen for the girl called Vannie Conniston, daughter of this mule-headed giant who kept the Space-Station. Plessner had decided to steal her—steal the ship, too, for some reason.

Conniston continued: "I've reared Vannie from a little cub of eight. Her

mother and I squabbled, broke up—I brought her here, to get her away from the rottenness of a civilization that lets such things happen. But why am I telling you? You met her here, refueling or something. Made a play for her. All right, Plessner, the girl's worth making a play for—she's worth marrying. You've pushed yourself into her life, and you're elected as the bridegroom." A wintry grin on the broad face. "I can make it stick. Here I'm in the position of any space-skipper—can give orders to any man or Martian aboard, judge and execute criminals, make Thanksgiving fall on Good Friday if I like. And," the big cube-chin thrust forward, "I can perform provisional marriage ceremonies—"

Harpe was at Conniston's throat.

FOR an instant the two swayed and struggled. Harpe's first aggressor advantage was quickly offset as Conniston brought bulk and strength into play, thrusting the lighter man back. A hand like a shovel pinned Harpe's shoulder, and a quick shove backed him against a bulkhead. The other fist swung—had it connected, Harpe's head would have been driven stunningly against the metal; but Harpe knew the trick, writhed and ducked. Conniston's mighty knuckles clanged on the bulkhead, Conniston howled with pain, and Harpe twisted loose.

Before the giant could prepare again, Harpe let him have right and left in the face. Conniston flinched ever so slightly, like a stone statue in a high gale; hit Harpe lightly on the mouth, then in the hard belly, and clipped him behind the ear as he doubled over. Harpe managed to reel away, recover, weave in, and then he got home, hard and clean, on the heavy jaw.

Even as that lucky punch sped home, Harpe cocked and let go another. Now it was Conniston who reeled and staggered, groggy. Harpe was after him, desperate and swift but calculating. The strife had driven all faintness from him.

Left, right, left—he clustered punches on the massive chin that now began to sag. Conniston made clumsy returns that bruised but did not punish, while Harpe speared him again and again with jabs and hooks. The giant spun half around, and Harpe clubbed the thick nape of the neck with a solid right. Conniston swayed like a dancing bear, pawing ineffectually at the smaller battler who circled him, striking again and again—scoring each time—would Conniston never collapse? He must. He was doing it. The great bulk settled, its mighty legs wavered. Harpe connected once more, Conniston settled slowly to his hands and knees. Blood dripped from his beaten face upon the metal flooring.

"Had enough?" Harpe panted, setting himself to strike again if his huge old adversary tried to get up.

But Conniston rolled sidewise into a sitting crouch. His big, fist-chopped features knotted into a demon smile.

"Well done, Plessner," he wheezed. "If it was only my welfare I'd say enough, and no hard feelings; but, since it concerns my daughter Vannie—"

He whipped something from his pocket, a bright flute-whistle. Before Harpe could stoop and snatch it, he had set it to his split lips and blew a shrill, prolonged blast.

On the instant, a rear door flew open and in rushed clanging, gleaming figures. Men in metal space-armor? No—

Robots!

THERE were three of them. Harpe tried to run, was cornered, tried to

fight. He failed miserably. The robots closed around him. Their lobster-claw appendages seized and subdued him. Conniston, now sitting well up, played other notes on his whistle, a mocking little trill of minor music. Responding, the metal creatures held Harpe's arms fast, and bound them with tight windings of steel wire—elbows to sides, wrists in front. Then they seated him in a corner. Conniston rose, pocketed the whistle. The robots relaxed, like three statues.

"Vannie!" called Conniston. "Vannie! Come—I have a surprise for you!"

She came running from some inner chamber, and through the door that had admitted the robots—light-footed and light-hearted, with a merry face that faded to utter perplexity. She looked at the robots, at the bound stranger, and her father's swollen and marked face. Conniston smiled, and took her slender hand in his big one.

"Here he is, daughter," he said. "Promised to come for you. Tried to change his mind, but he'll marry you, all right."

Harpe met her wide stare. Strange, in such a jam, to waste time and thought on what a pretty girl she was. A little thing, barely big enough to interest a man of Harpe's size—and trim, alive, a thing of joy. Buckskin hair, eyes as gray as her father's, and sweeter by whole planets. Her mouth was short, upper lip cleft and lower full. Even in mannish slacks and tunic, her figure was dainty and feminine.

"Who's this man?" she was asking her father. "Why is he tied?"

"Come, Vannie," sighed Conniston, as though impatient of opposition. "You know Mr. Manfred Plessner very well indeed. And he knows you. I know that you know each other. Don't waste time in denying—"

"Oh, break it up!" roared Zack Harpe, struggling against the wire bonds. "I'm not Plessner, I'm Zack Harpe. Look on the collar of my space-overall—it's stenciled there—and the buckle of this belt I'm wearing. Z. H., my initials. My papers must be in the pocket of my tunic. Have a look, you big flannel-head, and then cast me loose!"

Conniston picked up the overall and read the stenciling. He walked back to Harpe, studied the belt-buckle, then fumbled in Harpe's inner pocket for the papers. They bore photographs, thumb-prints, endorsements. Conniston gazed at the papers, then at Harpe, back to the papers again. He cleared his throat.

"You're Zachary Harpe, all right."

"Then get this wiring off of me!"

"All the more shame to you for making up to Vannie under an assumed name," continued Conniston stonily. "Well, you'll marry her as Zack Harpe. No mistake about that."

"Father," put in Vannie Conniston, "you must listen. This isn't Manfred Plessner. He—"

"You deceived me once, daughter. You can't work it again." Conniston turned doorward. "Talk it out, you two. I'll give you ten minutes to see reason. Otherwise, Harpe, I'll pipe my robots to fling you back into space, with only that chopped-up overall. And Vannie, I'll never trust you to meet and speak to any stranger again."

HE WAS gone. The wire-wound skipper and the slim, lovely girl gazed at each other woefully. All around them the robots stood, like an expectant audience of statues.

"Miss Conniston," said Harpe, "will you please start at the beginning—use easy words—and set me right on all this mess? I've been a war-pilot, a

space-flier, jailed on Mars and hunted on Venus, but I've never seen or dreamed the like of this. Talk up, right in front of these tin babies."

She looked at the three silent robots. "Oh, they can't hear. Can't move, even, unless Dad blows that flute thing of his—be made them himself, he can run them himself—"

"They're fine specimens," acknowledged Harpe. "Flute-notes for brains, eh? Talk about music having charms. . . . Look here, you agree and I agree that I'm not the man your father hoped to trap here. So unwire me."

Vannie Conniston pondered, hand to cheek—very pretty. "You gave Dad a cruel beating," she reminded. "I saw the marks. If I let you go, will you give him another?"

"Not unless he starts on me," vowed Harpe. "All I want is to get away."

"Tbat's not very complimentary," replied the girl, but she knelt and fiddled with the knotted wire. After a moment she gave up.

"Too tight," sbe told him. "A robot did that, with steel claws like pliers. It'll take a robot to undo them." She stepped back from him. "Well, all we can do is talk, Captain Harpe. How did you get here into my father's hands?"

He shook his head. "Not much to tell. Your hero, Plessner, caught me off guard and booted me into space. I drifted here, by using the cut oxygen-bose for a blast. Now tell me something. What's behind all this heavy-father stuff that's scorching both of us?"

"My grandfather's behind it," she informed him, and drew a long breath, as if for many words. He waited, and sbe continued:

"Dad married a rich girl. Her father — my grandfather — brought pressure and made her leave him. She died—broken-hearted—wben I was too little to remember."

"And your father became a hermit?" prompted Harpe, trying to ease his bonds.

"He did. He'd been a mechanical engineer of promise—the robots prove that—but he dropped his career. My grandfather was scheming to take me away from him by law; and so, fourteen years ago, Dad applied for this job. We've been here ever since, hiding from my grandfather. Nothing but the radio, and refueling and servicing chores, and the robots Dad makes." She stared mournfully at nothing. "Do you blame Dad for being rather warped and harsh? Or me for being lonely and wretched—and glad when your Mr. Plessner noticed me?"

Harpe thought about Plessner—the mate always handled the refueling detail at the Space-Station while he, Harpe, caught up on routine paper work in his cabin. That was why Harpe had never seen Jan Conniston, or his daughter, or the robots or anything. Plessner, sleek and curious, had caught a glimpse of the lovely, lonely girl. He'd made himself known to her, wooed her . . . Vannie Conniston elaborated those surmises for him:

"WE AGREED to radio each other for long QSO's whenever he was hereabout. It was fun. Something to do. But just now—Dad was listening in, it seems — he said he'd come and get me and take me away. That frightened me, I'll admit. Slowed me up."

"It ought to frighten Plessner, too," contributed Harpe. "Spaceways puts its rocket-officers under contract not to get married until they reach the rank of captain."

He saw more light. Plessner, by getting rid of him, would become Skipper. Did Plessner truly plan to marry this

lonely, lovely recluse? Was he willing to commit murder for that? Vannie Conniston would be a prize, even worth killing for; but was there something else?

"You're married, I suppose?" the girl asked him.

"Not me. If I were, this space-wedding your father's going to slosh down our throats wouldn't take. What kind of a wife would you turn out to be, Miss Vannie?"

She shook her tawny head, and smiled ruefully. "Probably a shrew. You've seen the kind of father I have. And on my mother's side, I inherit the temper of Rixon Powell—"

"Rixon Powell!" exploded Harpe. "Head of the Powell Explosive Trust on Ganymede? That Rixon Powell?"

"The same. You've heard of him?"

"Who hasn't? . . . Call your father. Our troubles are over, and you don't have to hide to keep from being stolen. Your grandfather died the day before we cleared from Ganymede. He left no relatives to hunt you down or—"

A chuckle from the door to the entry-port. Conniston loomed there, grinning in mockery.

"Still lying yourself out of this jam, Plessner—I mean Harpe?" he sneered. "My father-in-law's conveniently dead, so that everything will straighten out—eh? You surpass yourself. If there was any lightning in interstellar space, it would swat you dead for the champion liar of the universe."

Harpe scrambled to his feet, which the robots had not bound. "And lightning should strike you," he growled, "for the champion pighead and coward. You insult a tied man who could plaster all these bulkheads an inch deep with you if he was free!"

The giant head nodded. "I recognize that perfectly. I seem to have grown a bit too old for fist-fighting. So I leave it in the hands of my robots. Harpe, you'll marry my daughter? Yes or no."

Harpe shook his head, not trusting the savage words that filled his throat.

"SHE's lovely. Decent. A good bargain," said Conniston.

Harpe glared at him. All those things were true. If only—

Vannie put her hand on his shoulder. "He means it, Captain Harpe. You'd better agree to what he says."

"Miss Vannie," replied Harpe, "you're very kind, but I never feared the eye-color of any type of death. He speaks this much truth: You'd probably make a wonderful wife, temper-heritage and all. But I don't fancy that kind of a wedding. It would be a rotten trick on both of us." He faced back to Conniston. "I dare you to throw me out into space."

Conniston's big teeth stripped in a grin. "I never took a dare in all my life, Harpe. You've had your chance. Well, my robots will slide you back into that leaky space-overall, and set you right out where I found you."

From a pocket of his tunic he drew the flute-whistle that governed his metal servitors. Putting two fingers of each hand on certain note-holes, he raised it toward his lips. But, before a blast sounded, Conniston's broad face went blank, his mighty body quivered and slumped forward. The whistle, falling from his hands, clattered across the floorplates to lodge between Harpe's feet.

Just behind him stood a slim, smiling man known both to Harpe and to the girl. They chorused his name:

"Manfred Plessner!"

EVEN in his space-overall, from which the helmet was unshipped and dangling, the mate was sleek,

swarthy, elegant. Just now he held in his hand the short haft of a rocket-control lever, with which he had smitten Conniston down from behind. He laughed, and tossed it upon the huge, quivering body.

"My children," he said with false genialty, "I know all."

"You know—" Vannie Conniston echoed.

"All. You see, I've been listening to the radio. Jan Conniston here rigged up something to tap the main speaker system—and he left it running. I picked up all the dialogue that took place in this office. Most interesting. Most dramatic. He rolled up his handsome blue-black eyes. "And so, knowing that Conniston's attention would be taken up with you, I landed quietly on the far side of the hull—told the boys to start refuelling—nipped around and jimmied my way through the outer locks. And just now I had a chance to remove him from consideration."

Vannie had recovered enough to run to her father. She lifted his huge, grizzled head. "He—is he dead?" she stammered.

"Not now, but he will be," replied Plessner gently. "He'll die after you and I leave."

"I won't go with you," cried Vannie, looking up from her clubbed father.

"Yes, you will. I'll drag you. As to Harpe here, he has to die—so that I can recover him, dead, and comfort the crew."

Harpe understood that. His men would mutter the legend he'd mulled over in space, the belief that men lost between worlds became evil spirits. Plessner elaborated:

"I'll see that you're found, in that space-overall yonder, and taken home for Spaceways to give a classy killed-in-performance-of-duty funeral too."

"Miss Vannie," said Harpe, "listen to everything he says. You'll be able to wrap the law around his neck—"

"Not she," interposed Plessner airily, "for she'll be my wife. Can't give evidence against a husband, not in a criminal action. You see, I'll be Skipper now, and I can perform a provisional space-marriage for myself, just as Conniston was going to."

Harpe threw a kick at Plessner. He missed and fell to the floor. Chuckling, Plessner went to a set of gauges on the wall.

"Here's the air-exhaust." He turned a tap, which began to hiss. "You'll die quickly and quietly, of air starvation, just as you're supposed to have died. I'll slip back later, jockey you into your space-overall, sling you out to be picked up—"

"Plessner," broke in Harpe, "I suddenly realize that the legend is true. Air-starved-murdered — I'll become a space-vampire. I'll hunt you down, Plessner. I'll settle with you—after I die."

Plessner looked at him. The words of the pinioned man had chilled him despite himself. He gritted his teeth, and jerked Vannie to her feet. "Goodbye," he growled at Harpe, and went out, slamming the door. Zack Harpe was left alone in the thinning air, with the silent robots and the unconscious Conniston.

"At least I gave him a scare," said Harpe to himself. "And I meant what I said—I'll do my best to come back and haunt that swine—"

He slackened a little inside the wire bindings. They would not come off that way, either. "Conniston!" he called. "Wake up!"

THE injured man breathed heavily, but did not stir. No help to be had there. Harpe hadn't really expected it.

He turned over everything Plessner had said. The crew, running the fuel-pumps outside, had been told that he, Harpe, was accidentally dead—that meant they'd be loyal if they knew the truth. The ship was at hand, almost within jump of where be lay. It would remain so until it was well stocked with fuel, say half an hour. If he were free, could get there—but what had Vannie herself said about those tight-twisted honds? *It will take a robot to undo them.*

What was this thing on which he lay, this hard irksome projection? He rolled clear and looked—it was a pencil-sized rod of silvery metal—Conniston's whlstle. Harpe rolled back, seized the whistle in his bound hands. He remembered other things.

A robot could set him free. Conniston had been about to set rohots in motion for that very purpose, so that Harpe could be put back into his space-overall and sent out to die. Harpe had seen the position of Conniston's hands on the whistle's keyboard—fingers on the two upper holes, fingers on the two lower. He duplicated that position. Then, cranning his neck, he managed to touch the mouthpiece with his lips.

A note came forth, thin and sweet. Conniston stirred a little, but did not wake. The robots began to move, all three—Harpe prolonged the note. They clanked closer, closer. Their pincer-paws touched him.

They ripped and twisted at the knots. A strand of wire fell away. Another, another. Harpe was free. He lowered the whistle, and abruptly the rohots subsided into statue-like immobility. Harpe grinned in relief, pocketed the whistle. Then he ran to the air-exhaust tap, closing it. Walking back to Conniston, he stooped and looked—the giant's swoon had become a slumber. Leaving him there. Harpe burried away through the rear door.

Directly beyond were great shadowy holds in a series, filled with drums of rocket fuel and humming machinery. A whisper of liquid motion led him toward the pumps opposite—Plessner had not finished the refuelling. Harpe still had time. He entered an observation-cabin, the size of a coffin. He looked through a round glassite port.

Yards away, on the outer deck, was parked the rocket. Almost exactly opposite the port was the entry panel of the main airlock. It would mean seconds in space, but Harpe knew that he must chance it without wasting any more seconds.

Unclamping the port, he dragged it open. Pinching his nose hard to save his lungful of air, he hurled himself out. The port clanged behind him, soundlessly in space. Harpe hurried to the panel opposite, knocking furiously, frantically, with his free hand.

Moments of waiting, while his eardrums threatened to burst and his head swam and sang with an inner pressure as of sea-bottoms—then the space-hand on watch had opened the outer panel to let him in. Harpe gratefully crept into the lock, the panel shut behind him, and a moment later the inner door slid away. Harpe took a long stride, into the interior of the ship from which he had been kicked, which he had never expected to hoard again.

THE hand on duty there was Beamish, a big, simple-hearted spaceman, second class. Beamish was blank of face generally—hlanker of face than ever just now. He stepped back, staring at Harpe, lifting a shaky hand.

"No, Skipper," he gasped. "No. Look, you wouldn't come for poor Beamish. I never did anytbing to you—"

"What are you talking about?"

growled Harpe. "I certainly didn't come for you in particular. I came for Plessner."

"Then it's true!" that in a voice almost breathless witb horror. "I beard that girl—the one he brought aboard—oh, please, sir, I don't know anything about Plessner—spare poor old Beam—"

Harpe caught the fellow's arm and shook him. "Plessner brought the girl on board?" he repeated. "And you heard her say—what?"

Beamish managed words between chattering jaws. "That you'd come haunt him—that your dying promise would be kept—he swore at her, hit her in the eye, but— Oh, I could see he knew you'd come back from the dead, and—"

Harpe turned from the shivering space-hand in disgust. By sheer chance he confronted a chromium facing of the corridor, and in it saw the reflection of his face. At once he understood.

He was pale, tense, from his brief run through emptiness. He was bloody, too—Conniston's clumsy blows had cut his mouth and nostrils, and the relaxing of pressure between port and ship had caused great gouts of crimson to spring out and mantle his cheeks and lips. That was exactly how a man looked who died of space-smothering. And Beamish, of course, had thought his Skipper dead, a space-vampire—

"Stand easy, I'm alive," he assured Beamish gruffly. "Plessner tried to rub me out, but it didn't take. Look here, has Plessner got the girl in the captain's cabin?"

Beamish nodded, recovering. "Yes. With a guard at the door. Farjohn. He says that he's going to perform a marriage ceremony— Are you really—"

"Flesh and blood? Yes." Harpe considered swiftly. Farjohn was an engine-hand, unsavory but smart, a close friend of Plessner. Undoubtedly in the plot with the mate, also thinking that Harpe was strangled to death for lack of air— It all added up to a grand inspiration.

"Beamish, am I pretty chalky pale? Lots of blood on me?" He lifted a forefinger, skillfully dabbling more blood where it would look most horrific. "All right, stay here and keep quiet. I'll be back."

HE HEADED down corridor, to the place where it made an angle. Just beyond was the captain's cabin, where Plessner would hold Vannie prisoner, with Farjohn outside. He paused, listening.

"I won't!" snapped the voice of Vannie, as fiercely as her big father himself. "You won't make me sign that property-transfer!"

"Then," Plessner was replying easily, "I'll sign it for you. And Farjohn, just outside, will witness my signature as yours."

"I'll deny it," assured Vannie.

"You can't. Not legally. Remember what I told you—wives can't give evidence against their husbands in criminal actions? That law goes clear back to the ancients."

"Oh," she cried in honest loathing, "you'll pay for this—when Captain Harpe returns from the dead, a space-vampire, hungry for vengeance on—"

"Shut up on that kind of talk!" Plessner almost screamed, his mocking ease of manner departing.

Plessner was shaky on the subject of that superstition. In a word, he believed. . . . Harpe walked around the corner.

Farjohn lounged against the door-jamb. In the hollow of his arm was tucked an automatic rifle, while his other hand tilted up a dewy bottle, from

which American beer purled delectably down his throat. Harpe clicked his tongue thrice—Tck! Tck! Tck! As Farjohn turned toward him, the skipper stepped up and snatched **away both** bottle and rifle.

For a moment they confronted each other. Farjohn's bold face lengthened, his jaw dropped farther and farther. He tried twice to speak or scream, then whirled, tore open the door he guarded, and rushed inside.

Again Harpe paused, listening.

"I tell you it is—it's him! Harpe!" Farjohn yelped out.

Plessner waited before replying—he must be having trouble with his voice. "You've had a drop too much of that beer, Farjohn. Harpe can't come to life—he's dead by now—I saw to that—"

"I'm telling you, he's dead!" yelled back Farjohn. "All white skin and red blood—a *space-vampire*—"

Once again Harpe smiled to himself. He set down both the rifle and the beer-bottle. With one toe he pushed open the door. He made his voice deep, tomb-deep:

"Yes. You killed me, Plessner. But I came back, as I promised."

FARJOHN, nearest the door, gave one sick stare and threw himself on a bench, sobbing like a child. Harpe stepped heavily past him, widening his eyes and fixing them on Plessner. Vannie stood back, perfectly quiet and at earnest attention.

Plessner put his hand to a pistol at his belt, but it seemed too heavy for him to draw. "You're dead," he snarled, in a voice of savage protest.

"Yes," intoned Harpe. "Dead. And so will you be dead."

Plessner gave back. Harpe followed. Plessner was trapped in a corner. Harpe lifted a hand—the hand that had been chilled by Farjohn's beer-bottle—and laid it on the side of Plessner's neck.

The mate sighed gently, and sank down as if all his bones had been taken from him. Harpe bent over him, and nodded to himself.

Those space-superstitions are powerful influences on the imagination. They can stop your heart with fear—if you have a reason to be afraid enough.

"Well done, Captain Harpe," Vannie was saying. "I knew, somehow, you'd get free and come here—I did my best to build up a state of mind in this man to help you when—"

And she, too, collapsed. But Harpe caught and held her.

SHE wept, and was refreshed thereby. "Captain Harpe — Zack — oh, you escaped, and I'm so—glad—"

Her cheek was wet, and he wanted to kiss it. But his face was all bloody. "Easy," he begged. "Take it easy. Wait till I wash up, Vannie."

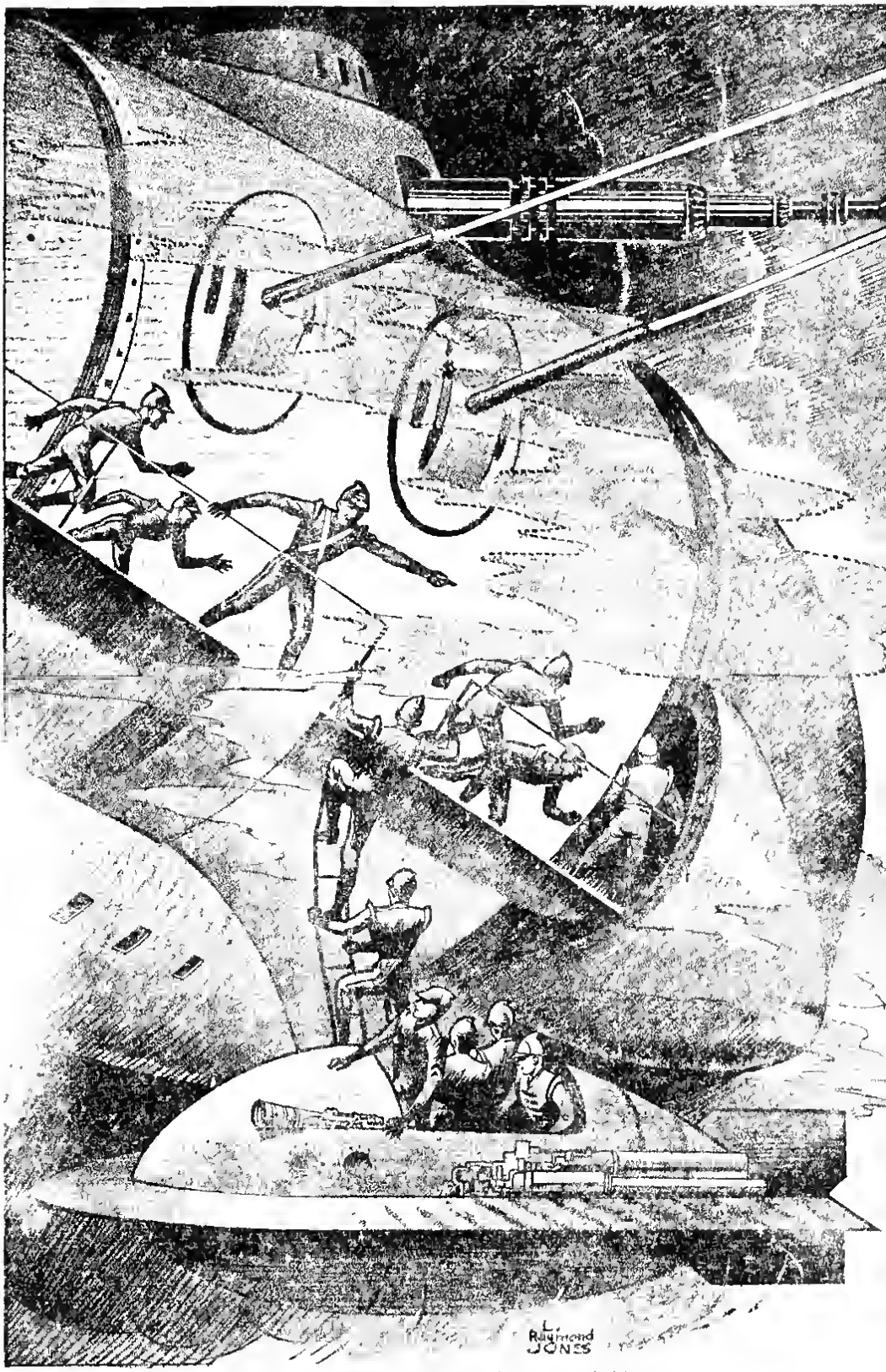
"Don't let me go," she begged in turn. "Oh, don't—I've been through so much, just hoping that you'd come—you're the only man who ever tried to help me. Don't let me go, Zack—ever!"

He did not let her go. He mused that fate rules space, as well as planets. Vannie wanted him. He—now that he had time to think—wanted her. They'd get along well together. She'd be rich, but you can't shake a girl off just because she doesn't come to you in rags. . . .

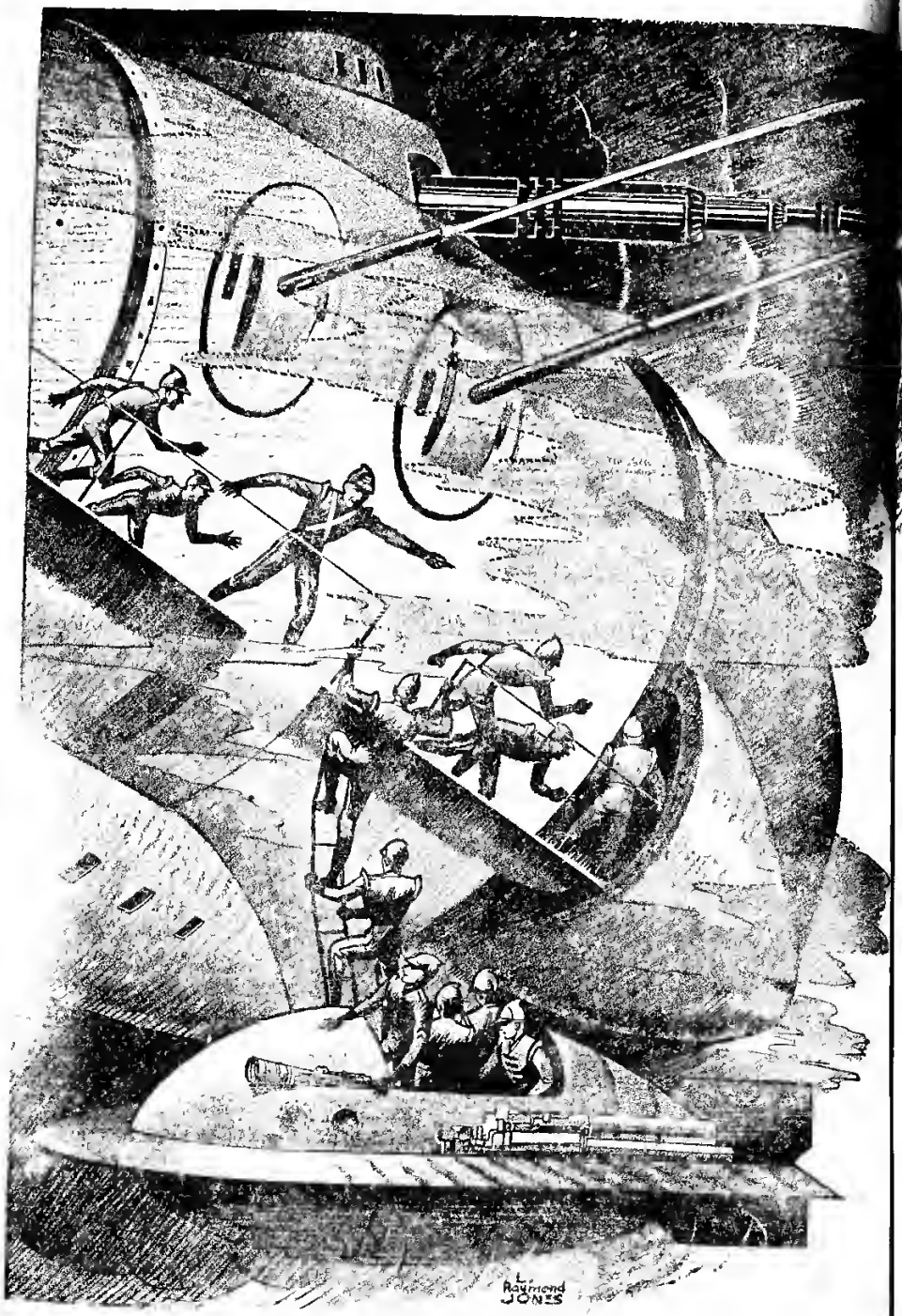
He coaxed her back into command of herself, then washed the blood from his face. Then, addressing Farjohn on the bench:

"You're under arrest. When we get to home port, you'll explain this to the authorities—maybe you'll keep from

(Concluded on page 166)



One by one they scrambled up the swaying ladder



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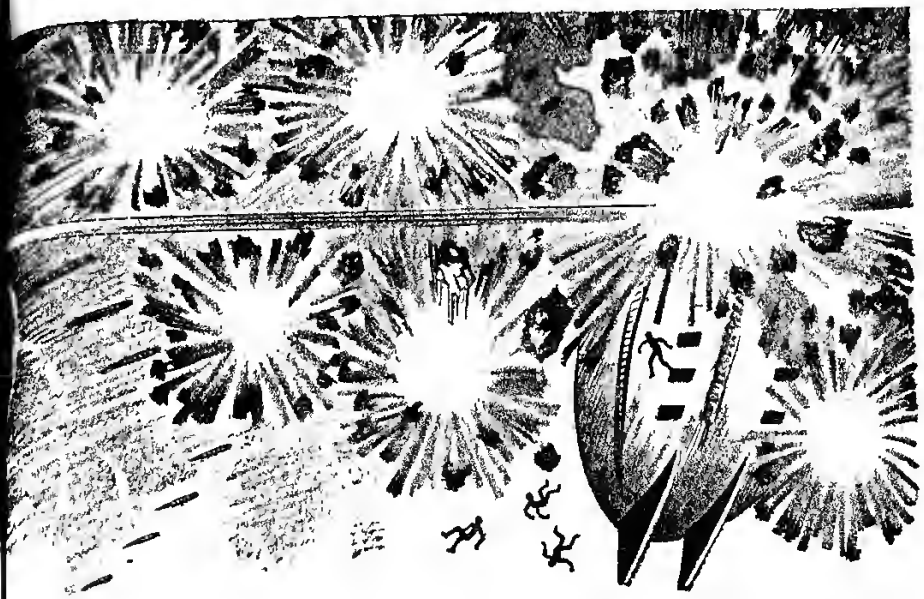


Sergeant Shane Goes to War

by JOHN YORK CABOT

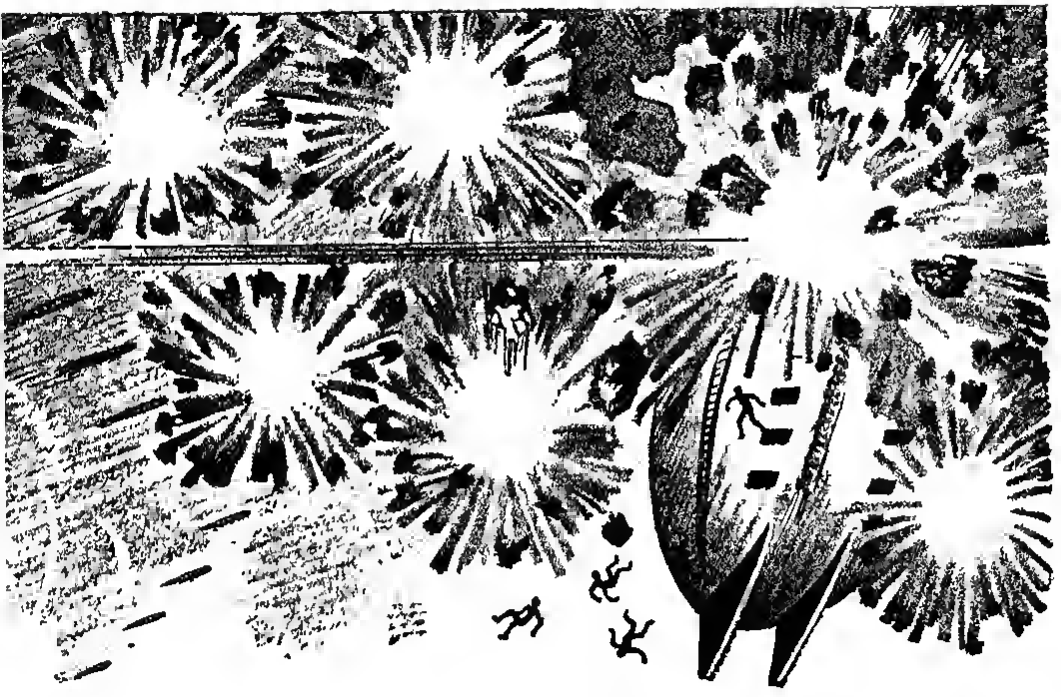
Trust Sergeant Shane to screw up the works—even when he set out to do his fighting duty!

IT WAS during the stopover of the F.S.S. *Western Hemisphere,* our space battlewagon and pride of the Federation Fleet, in the big space harbor base on Saturn, that my ape-like companion and hare brained associate, Sergeant Shane, weathered one of the wildest and wooliest escapades in his long and lucky career—and when I say lucky, I mean *very* fortunate!

And it was on a bright and shining morning of that stopover, that Shane found me trying to catch a little sleep on the third atomic gun deck and promptly put an end to all such hopes.

"Corporal Cork," Shane declared in that saw-tooth voice of his, "this is a positively disgraceful posture I find you in."

I had been stretched out flat on my



Sergeant Shane Goes to War

by JOHN YORK CABOT

Trust Sergeant Shane to screw up the works—even when he set out to do his fighting duty!

IT WAS during the stopover of the F.S.S. *Western Hemisphere,* our space battlewagon and pride of the Federation Fleet, in the big space harbor base on Saturn, that my ape-like companion and hare brained associate, Sergeant Shane, weathered one of the wildest and wooliest escapades in his long and lucky career—and when I say lucky, I mean *very* fortunate!

And it was on a bright and shining morning of that stopover, that Shane found me trying to catch a little sleep on the third atomic gun deck and promptly put an end to all such hopes.

"Corporal Cork," Shane declared in that saw-tooth voice of his, "this is a positively disgraceful posture I find you in."

I had been stretched out flat on my

back, basking in the sun, burning a few space wrinkles from my harrowed brow. Now I grit my teeth, sitting up to glare balefully at Shane's unlovely red map and squat, powerful figure.

"Find your own spot," I said. "I was here first."

Sergeant Shane carefully adjusted his immaculate tunic uniform, brushed an imaginary speck from the chevrons on his arm, and smiled tolerantly. I saw that he had even plastered his usually wild thatch of tow hair smooth with water.

"Corporal," he said disapprovingly, "I don't think I need remind you that I am not a loafer. I am a man of initiative, of forceful drive and get-up-ishness. You can see from my appearance that I do not intend to spend my idle hours sleeping in the sun."

"That's fine," I growled, "then go off somewhere and be forceful. But not around here."

"Very well," said Shane, shrugging too indifferently. "Very well, Corporal. If you aren't interested in hearing what I was about to tell you—"

He turned, starting away.

THIS was much too suspicious. When Shane is coy, it usually means he has something up his sleeve beside the hairiest and strongest arm in the Fleet. And when Shane has something up his sleeve, it is generally a good idea to find out about it before he makes a super colossal ass of himself.

"Wait a minute!" I said.

Shane returned.

"What's up?" I demanded. "Why are you turned out like a dress parade? What woolly idea is cavorting about inside that fleece fogged brain of yours?"

Shane started to turn away again. "From the jealous nature of your questions, I can see you aren't inter—"

I climbed to my feet and put a restraining hand on his muscle-bulging shoulder.

"Not so fast," I demanded. "What's eating you?"

"Do you like your job, Corporal?" Shane asked out of a bolt blue sky.

"Huh?"

"Are you satisfied to be a mere Space Marine?" Shane demanded.

My eyes almost dropped out of my head. "What?"

"Or," Shane continued, "would you rather better yourself, *be* something in this universe?"

"Be what, for example?" I demanded, still uncomprehending.

"A man of wealth, of prestige, of business acumen, for example," Shane recited.

I began to get the idea. It was over four months now since Shane, through sheer staggering luck, risked every last nickle of our joint retirement savings—a thousand dollars, Venusian—on a lifecraft race and turned it into three thousand. I had wondered how long it would take the sawed-off baboon to begin to get the itch to tamper with that small fortune once more.

"Listen," I said, "if you've got ideas on that money of ours, I'll tell you right now to forget it. We've been saving that for years, so that we'll have our space freighting outfit when we finally muster out of the Space Marines."

"Space freighting," Shane said. He pronounced the words distastefully, as if they meant louse exterminating.

"And what," I demanded hotly, "is wrong with space freighting?"

"It's all right," Shane said, "for them as have no foresight, no imagination. For them as want to live out their lives in the ruts of mediocrity."

I looked at him, jaw agape. Those weren't his own words. He didn't even

know words like that. A great light began to dawn on me.

"So you want to improve yourself," I said sarcastically.

"Improve my future," Shane corrected me.

"Why?" I demanded. "Who is she?"

Shane flushed. His cauliflower ears went crimson. He glared. "Keep Cleo out of this!" he snapped.

"Cleo, eh?" One in every port. That was Sergeant Shane.

Shane's flush burned deeper. "That is neither here nor there. My proposed investments in Saturnian real estate have nothing to do with Cleo."

"Real estate investments?" I really gasped this time.

"Saturnian real estate," Shane said doggedly. "I have investigated the possibilities. They are enormous."

"Real estate!" I repeated this aghast. "You, a space faring marine, interested in real estate!"

"Millions are being made in it every day, Cork," Shane snapped. "And just because I'm smart enough to fall in on a good deal, you've no reason to act so damned stupid. Why don't you let me explain?"

"Go ahead," I said with a sinking feeling in the pit of my stomach. "Go ahead, and explain."

Sergeant Shane did exactly that. Explained, while that sinking feeling grew more and more pronounced witb every word.

IT SEEMED that five days ago—the day after we'd put into this space port—Shane went to a Service Party, put on by the wealthy dames and dolls of the Service Society in the interests of morale and uplift for the men of the F.S.S. *Western Hemisphere* and other Federation Space Ship crews in the harbor at the time. I recalled that I hadn't gone, in spite of the fact that Shane had tried to talk me into it. Now, as he continued, I wished fervently that I hadn't been obstinate.

Shane met a wealthy dollie there, of course. Cleo Clenoka, the daughter of a financially prominent Martian, Sbane said, who had wide real estate investment holdings on Saturn.

"She took a shine to me right off," Shane described the meeting unblushingly, "for which I can't blame her."

It seems that in his attempts to impress this Cleo doll, Shane modestly mentioned the fact that, although on the surface he appeared to be merely a Sergeant in the Federation Space Marines, he was a man of no little wealth, having a bank account of a little better than three thousand salted away. He had added that he intended to go into the space freighting business with this when he left tbe service.

"She gave me some good ideas, that dame," Shane related. "She told me how it was a shame tbat I should waste my natural get-up and drive and brains on anything as small fry as space freighting."

I nodded grimly. That's how the change in attitude came about. It seemed that since Cleo's daddy was a big time real estate man, she thought it would be marvelous if Shane could meet him. Maybe something would come of it.

"A good guy, Cleo's father," Shane declared. "High class Martian. He looks and thinks in terms of millions. He put me wise to a lot of angles. And, naturally, he, too, took a shine to me."

"Naturally," I broke in. Shane didn't catch the infinite sarcasm in my voice. He went on.

It seemed that this Clenoka guy was willing to let Shane in on a good thing, a real estate merger that would net Shane a bundred percent on his—I

mean our—money. This deal was primed to come off in another two days. And at the moment, Shane was all spruced up to go to Clenoka's office and make the final arrangements for putting up the three thousand. He had a date with Cleo, of course, after that.

"So," I said, when he concluded, "you're going into the real estate game, eh?"

"That's it, Corky," Shane beamed. "It's a natural. The three thousand will turn into thirty when this deal is done."

"You mean the fifteen hundred," I said.

"Huh?" Shane blinked at me.

"The fifteen hundred," I repeated. "Your half of the three thousand. You own it, I can't tell you what to do with it. But count me out."

"But Corky!" Shane bleated.

"You heard me," I said. "Maybe for once in your life you've fallen in on a good thing. But what do you know about real estate? You're a space Marine. Use your head. If you have to throw your dough away, do it on something you know something about."

Shane began to get sore. "Fifteen hundred won't do it," he said. "I told Cleo's dad that I had three thousand to put up. What sort of a washout will I look like if I hafta go there and say my own best friend wouldn't come through, and that I only got half of what I shot off my mouth I could get?"

"That," I said finally, "is your worry."

"But what," Shane bleated desperately, "will Cleo think?"

"I thought that was what you were worrying most about," I said. I started to turn away.

"But, Corky!" Shane said. He closed his ape-like paw hard on my shoulder. His eyes were pleading.

I shook off his arm. "That's what I think about it," I said. I left him there, thinking that was the end of it. It wasn't . . .

THERE was a routine watch inspection for me to make, and since Shane's real estate pipe dreams had put an end to my contemplated snooze in the sun, I decided to get it over with.

When you've checking to do on a huge, space-going battle wagon of the F.S.S. *Western Hemisphere's* dimensions, it takes a little time. There were atomic turret cannon crews to be checked at their stations, electronic short-fire gun emplacements to be rehearsed, and countless other tasks all in line with our Admiral, Old Ironpants, recent siege of the jitters.

And thinking of Old Ironpants' clamp-down on inspections these past weeks, took my mind from the peanut brain of Sergeant Shane, and set me to wondering about the rumors prevalent that Old Ironpants expected trouble.

The Interplanetary situation was tranquil enough. Federation Government seemed to be living in harmony with the rest of the universe. There had been a few minor war outbreaks between smaller, independent asteroid governments on the outermost fringes of space; but these were always present. Still, in spite of all this, our Admiral was keeping every vessel in this space port in constant readiness.

I shrugged it off, finally. Hell, maybe his wife was cracking down on him. It was generally conceded that Mrs. Ironpants was the cause of the often gouty mental state of our Admiral.

An hour or so went by, and I was concluding my check-up. I was in the *space-radio* control room, gassing with the operators, when the Chief Space-sparks came in. He'd just returned from a forty-eight-hour furlough on Saturn.

"Saw your playmate about half an hour ago, Corporal," the Chief Spacesparks said casually.

I grunted.

"You guys planning to break the gambling joints on Saturn?" he asked.

I looked up sharply. "What makes you say that?"

"Shane was in the Federation Bank when I saw him. He was taking out a stack of leaves half a foot thick." Chief Spacesparks said this casually. But it didn't hit me that way. Something turned in my stomach.

"Fifteen hundred bucks?" I asked weakly.

I watched Spacesparks shake his head indifferently. "Naw, more than that. Must have been two or three thousand at least."

Two or three thousand! The *space-radio* room began to wheel before my eyes. The walls, gray normally, went green. I didn't say a word. I lurched out of there like a space-sick rookie on his first void drift. Two or three thousand, undoubtedly three. Shane had undoubtedly gone against my express wishes. There was no question but that he withdrew our entire bank balance to stick into the slick Saturnian realty deal!

My sickness was leaving. I was cold, then hot, then cold. Then I was burning, mad. I kept telling myself again and again that I deserved this. Deserved it for having been stupid enough to think he'd do anything but go ahead with the deal as he'd planned it in the first place.

An orderly was passing. I called him and he stepped over, saluting. I gave him the check report sheaf I had in my hand.

"See this gets to the Adjutant," I told him. "Check report from Corporal Cork."

There was still a chance to catch that hare-brain. Still a chance to stop him. Frantically, I started down the duralloy companionway toward the launch landing deck. I could hear the throb of a launch's atomic motors readying for a 'cross harbor jaunt to Saturn. I dashed for it . . .

AT THE Federation Bank, the teller was smiling affably.

"Yes, Corporal," he said. "That's right. Sergeant Shane removed the entire balance just a little while ago. He told me that the two of you contemplated some investment of some sort. He said that you'd be redepositing the money, plus several thousand more in a few days."

I had been burning as I entered the bank. Now the confirmation of my fears had been made, and even the perspiration that beaded my brow sizzled.

"Look," I asked, "do you have a book listing the real estate corporations on Saturn?"

The teller said he did.

"Then find me one whose owner is a Martian named Clenoka," I said urgently.

The teller found a little book, paged through it.

"Ah, yes. Here it is, Corporal." He gave me the address. I got out of there like a burst from a long-range rocket gun . . .

It was on one of those crazy, twisting, little Saturnian side streets just off the main business section. The door was plain, of gray duralloy. On it, in black electrolettering, was stamped an unobtrusive legend.

A. Clenoka & Co.
Asteroid Realty Holdings

I stood there looking at the sign on the plain little door in that dingy street.

If, as Shane had said, Clenoka was a million dollar guy, he certainly didn't want to show it by the office space be'd rented.

I climbed the three dingy little steps and poked the antiquated buzzer summons. Nothing happened. No one answered.

Trying to see in througb the curtained *glassicade* windows was futile. They were too dirty for that.

Indecisively, I punched the buzzer again. There wasn't a sound from inside. Then a voice sounded. From behind me.

"Okay, Marine. They've gone, and you'll come along witb us."

I turned around, looking straight into the barrel of an atomic pistol!

Two grim looking gentlemen stood there. The one who was holding the atomic pistol was the one who'd spoken.

"What is tbis?" I demanded. "High pressure real estate salesmanship?"

The one with the gun flashed open his tunic coat briefly. A very authoritative badge, one I recognized instantly, flashed momentarily.

"Federation Secret Service Agents, Corporal," the fellow with the gun said quietly. "Come along with us. We want to find out what you know about this place. We want to find it out in a hurry."

I opened my mouth to protest. Then I closed it sharply, while icy fingers of fear played my spinal cords like a harp. What, in the name of the Space Marines and all that was holy, had Sergeant Shane hlundered us into this time?

There was nothing to do but look docile and willing. I strove for that expression, and the chap with the gun, slipping it into his pocket but still keeping his hand on it, stepped down a step to let me walk along in between them.

As we moved along the crooked little street, one of them on either side of me, I tried several explanations by way of rehearsal.

"I was just looking for a friend," I said, and only then realized how stupid it sounded.

My guards didn't say a word.

"I don't know what this is all about," I tried a little later.

They moved on beside me in frosty silence. The very chilliness in their attitude suggesting that, whatever my dear buddy, Sergeant Shane, had embroiled us in this time, the affair was somethlng more than a trivial matter.

And pretty soon I began to get the idea. We were taking a series of streets leading inevitably to the Federation Police Headquarters ou Saturn.

I gulped, hreathed a prayer, and tagged on a curse for dear old Shane . . .

THERE was a very stern looking old duck sitting in the office of the Federation Police Headquarters to which the Secret Service agents had taken me.

"You understand, Corporal," he said when I'd been led in before him, "that this is not a matter of mere Federation Police business. You are in the office recently taken over by the Secret Service. We are engaged in very serious matters here on Saturn. Matters which have not a thing to do with Police work. Matters, in sbort, concerned with a clever undercover Martian espionage ring rumored to be in action here."

I stood there gulping. My eyes must have been bugging from my head.

"We helieve," said the stern old duck behind the desk, "that the Federation's Space Base here on Saturn is gravely imperiled by this recent flurry of espionage."

"Look, sir," I broke in hastily. "I swear I don't know a damned thing about—"

The stern old duck held up his hand, cutting me off.

"You have been under observation for the past several days, Corporal. As Sergeant Shane's closest companion, we naturally put you under surveillance the moment we determined that his actions were suspicious."

As much as I'd have liked to choke Shane to death at that moment, common justice and long practice made me rise to his defense.

"See here, sir," I said with proper indignation. "Shane is one of the most trusted men in the Space Marine Corps. He loves the Service, and the Federation as he loves his own life. He would never enter into anything that even suggested dislo—"

Again the upraised hand of the stern old duck cut me off.

"Perhaps, if you are innocent, Corporal, we know factors in relation to Shane's behavior of which you remain in ignorance. Our men first noticed him dealing with the so-called Clenoka Realty Co., five days ago. At the time we had been suspicious of this firm, feeling it was a front for Martian espionage work. Shane's almost constant dealing with them in the last five days was naturally suspicious. They were quite possibly obtaining Federation Space Fleet information from him which they deemed valuable."

This was more than I could stand. The circumstantial evidence was too grossly unjust, even for a loggerhead like Shane.

"I can explain that, sir," I cut in hotly. "He told me all about it this very morning!"

THE stern old duck raised his eyebrows, but clamped his lips shut, as if inviting me to say what I could while there was still a chance. I took the invitation, driving in with a swift barrage of explanation. In less than sixty seconds I told him everything I knew. But when I looked down at the stern old duck's pan, I knew I could have chopped it up for ice cubes.

"That could be true, Corporal," he said in a voice that inferred he knew damned well it wasn't.

"But it *is* true!" I yelled. "Call the Federation Bank and find out if he didn't withdraw three thousand Venusian dollars just a few hours ago."

"Why," asked the stern old duck with irritating logic, "might it not be possible that Sergeant Shane, realizing we were too close on his tail, withdrew your money and his in order to have enough money to effect his desertion and flight?"

"It *could* be," I agreed in exasperation, "but it isn't."

"Then where is Sergeant Shane right now?" asked the stern old duck. "And why is it, coincidentally enough, that he has disappeared at the same time that Clenoka and his fraudulent real estate office workers have disappeared?"

"But he hasn't disappeared," I said, sweat beginning to pour down my spine.

"Do you know where he is?"

"No," I admitted, "but he might still be with Clenoka."

"That," said the stern old duck with a smug compression of his lips, "is just what we have figured."

I felt sick all over, and suddenly began to think of my own hide as well as Shane's.

"What about me?" I asked. "You still don't think I'm guilty do you? You don't think I have anything to do with this mess?"

The stern old duck raised his bushy white eyebrows in what was genuine surprise.

"Why," he declared, "of course you are still in this, Corporal. Until you have proved yourself innocent, you are in it well over your neck. After all,

you were Shane's closest friend. You were found trying to enter the offices of a group of Martian espionage agents with whom Sergeant Shane had some connections. We are holding you indefinitely!"

I started to open my mouth in further protest, then clamped it shut. The cold, hard, frosty look in the stern old duck's eyes brooked no compromise.

An instant later, and I felt a hand on either arm.

"Come along," said a voice. It belonged to the Secret Service Agent who'd pulled the gun on me in the Saturnian street some twenty minutes back.

I thought of Sergeant Shane's ugly, grinning, stupid pan, and I started grinding my teeth slowly down to gum level. . . .

HALF an hour later I found myself pacing *duralloy* cell flooring for the hundredth time. They'd taken me right from the room in which the stern old duck presided to the downstairs confinement block belonging to the local Federation Police. But local police cell or not, the fact remained that I was actually a prisoner of the Secret Service.

When my frothing fury over my chum's colossal stupidity had subsided, I'd finally gotten around to the far more serious and necessary details of figuring this mess out from all angles.

Undoubtedly Sergeant Shane had mixed himself up with the very nasty background of Martian espionage work. The Secret Service were by no means as thick-witted as Shane, and if they'd put the finger on Clenoka and his fake company as an undercover agency for a foreign and never too friendly government, they knew whereof they spoke.

But as for my peanut brained buddy, I didn't doubt for an instant that he had nothing to do with any such treasonable hobbies as selling information to foreign powers. He was as staunch a patriot of the Federation as he was thick witted. Undoubtedly, he'd been ensnared by this Clenoka's daughter Cleo, plus the get-rich-quick realty deal that he'd been sold.

And in his big, open-minded way—open at both ends—he'd probably been convinced that everything was on the up and up.

But why had the Clenoka's been interested in him? Obviously as a source for information.

Even at that, however, Shane wasn't a fount of intelligence when it came to the deep dark secrets of the Space Fleet. He was just a cog in some huge machinery. What he'd have to spill, probably every foreign government in the interplanetary system knew already.

Then what could the Clenoka's have wanted from Shane?

Grimly, I put my brain cells to this problem. What information *did* Shane possess?

It kept up this way for another fifty pacings of the *duralloy* flooring of my cell. All the time I pounded my palms against my forehead. But this process not only didn't jar any hidden nuggets of information loose, it gave me a headache.

Then, all of a sudden, out of the fog grew the Great Dawning Light. Of course! I was as thick as Shane not to have thought of it sooner!

Shane's daily in-harbor task was the laying of the atomic mine fields around the space port entrance. It was his duty to vary the position of these mines from day to day, in line with the Admiral's jittery watchfulness during the stopover, and report these changes to Old Ironpants himself, who relayed the information to all Space Fleet craft who

might have legitimate business scooting in and out of the space harbor.

My chum Sergeant Shane, then, was the only accessible non-com member of the Space Fleet with the dope about the day-to-day changes in the protective mining of the space harbor! *

It suddenly became very plain why such information would be extremely valuable to agents of a foreign power; especially if that power were as generally unfriendly as Mars was to the Federation. For it was positive that, if there were any power ever willing to throw the universe into a war against the Federation, that power would be Mars. Even though we weren't at war with Mars at the moment, and hadn't had actual conflict with her in over half a century, there was no mistaking her attitude in consistent interplanetary dealings.

EVERYTHING suddenly fitted in like the pieces of the ancient and occasionally revived jigsaw puzzle. The jittery attitude of Old Ironpants. The special crew of Federation Secret Service Agents working furiously on this situation coming to light on Saturn. Yes, indeed, everything suddenly arranged itself in a pattern with chilling implications.

And suddenly I thought of what Shane's stupidity might lead to. And I thought of how deeply the two of us would be involved in what might explode.

None of this made pleasant contemplation. For there was nothing which could be done to alter the mess. Shane's clumsy foot was already in the fire. Even if, somehow, we could be able to create enough doubt as to our actual complicity and guilt to save our hides from seven electron rifles in the hands of a firing squad, we'd still be washed up in the Service.

Our stripes would be sliced from us, our prestige gone; and any chance of continuing in the Space Marines without shame and humiliation would be impossible. By the very fact that we'd prove our innocence, we'd have first to prove our complete stupidity and ignorance.

A lovely kettle of grief this was.

I knew, of course, that I could clear my own tunic, keep my own stripes, by merely establishing my minor part in the affair. Shane would corroborate my story, and the disgrace would be left for him alone to bear. But, hell, something kept me from clinging to that one way out. As much as I hated that towheaded half-wit's intestines at the moment, we'd been through too much together for me to let him face the music—or the firing squad—alone.

And don't think that my realization of what a sucker I was being for that space-slappy sap didn't burn me up—it did! But it stood as it stood, and I wasn't going to climb out on him now. For if ever the ape-like ass needed me, this was the time.

Needed me—the thought was suddenly most ironic. Maybe Shane needed me, but that wasn't going to help much. I was behind a nice set of *mangonic* bars in a cell with a *duralloy* floor, walls, and ceiling. I was in no situation to get dramatic ideas about throwing my help to anyone.

I sat down heavily on a cot in the corner, just as the *vibrasiren* began

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* *Atomic mine fields*—Invented in the 22nd Century, the atomic mine solved one of the greatest defensive warfare problems in space harbor protection. Quite invisible, being formed of highly explosive atomic elements, these mines can be "anchored" in space to block off any given area in need of such protection. They were also used extensively in offensive warfare from their inception, being utilized to "bottle" large flotillas of enemy spacecraft, and blockade enemy space harbors from the outer space fields.

its weird soundless tickling of my eardrums!

IF you've never been out on an Interplanetary Space Fleet Base, you won't be familiar with *vibrasirens*. Earth and the planets close to it still signal space raid alarms by audible *electasirens,* loud wailing alarms that shriek through the air like a dying banshee.

But on Saturn, as on other Federation Space Fleet Bases, these inaudible *vibrasirens* are used to sound alarm for attack or danger. They travel soundlessly through the air, reacting only on the surface of your eardrums, starting them to tingle.

I was on my feet the moment the sensations of the *vibrasiren* came to me. On my feet and dashing to the barred section on the door of my cell. Attack alarm!

The worst was evidently just starting to happen!

A guard ran toward my cell. But from the look on his face I knew instantly that he was not thinking of stopping for a chat. He was headed rigbt on past, that boy. He'd heard the *vibrasiren* too, and wasn't wasting time to seek shelter.

"Hey!" I yelped. "Hey!"

He saw me, and I caught his eyes gazing in surprise at my uniform tunic. He broke stride falteringly.

"Let me out of here!" I howled. "I'm a Space Marine. I was slugged and tossed in here by Martian saboteurs working from the inside of headquarters here!"

It was a wild tale, improbable maybe. But my audience was a damned excited guard. An alarm had been sounded. A uniformed Space Marine telling tales of dirty work and Martians running loose in the cell blocks. Hell, he was dumb enough to fall for it. Don't tell me he was half-witted, for remember I'm an expert on degrees of stupidity—my buddy being Shane.

Excitedly, he fumbled at the electron buttons that opened my cell door. Then I was out, leaving him far behind as I dashed down that corridor. The attack alarm of the *vibrasiren* was still tickling relentlessly at my ears.

I hit the twisting Saturnian streets two minutes later. No one had stopped me, or tried to. Hell, an attack alarm had sounded, and this was business.

At the landing platforms, I found a space launcb from the F.S.S. *Western Hemisphere*. It was almost loaded with space tars and Marines who'd heard the *vibrasiren* sounding the attack and were now running out from the saloons and joints to get up into tbe space harbor to their ship and battle stations.

The last of them piled on, and we were off. From far in the strata above us, we could already hear the peculiar bark of atomic cannon fire opening to repel this attack.

Marines and space tars were turning excitedly to one another, jabbering bewilderedly, indignantly.

"Who in the hell do you suppose—?"

"What in the devil do you think—?"

ALL of them were outraged, all of them cool and determined, but none of them aware what interplanetary enemy of the Federation had launched this attack. Many opinioned tbat it was Mars, others argued that it was Venus. None could agree.

Except me. And there wasn't any doubt of it in my sickly certain conscience that this could be nothing but a Martian attack. A Martian attack Trojan horsed, so to speak, by Clenoka—from the information unwittingly handed over to him by one Sergeant Shane, late of the Federation Space Marines!

I closed my eyes then, and made all sorts of silent vows. Then I said some prayers, prayers begging that Shane be permitted to die honorably rather than live to face the disgrace that waited when this was all over. I added a few prayers for myself along tbe same line.

We were into the space harbor then, and shooting up alongside the familiar bulk of the F.S.S. *Western Hemisphere.* And all around us the din of atomic and electric cannon fire was now tremendous.

Small space fighter craft, most of them the crimson marked Martian raiders, shot everywbere around that harbor. A dozen of them must have slipped through the atomic mine field and into the barbor already. Many hundreds more, I knew, would follow.

I climbed from the launch in that stinking, smoking din and confusion. Then I was aware that I was dashing to my battle station at an atomic gun turret. The entire harbor was an inferno of confusion.

DASHING across the deck of the F.S.S. *Western Hemisphere* I sidestepped the running space tars and Marines who were also leaping to action at their battle posts. Several of the small Martian space fighter craft were diving alternately at our ship, strafing the decks with withering atomic cannon fire.

And then I was climbing the *duralloy* ladder to the gun turret, clambering in behind its thick protective armoring of *mangonic.* The rest of the crew for this atomic gun were already in action, stripping the huge weapon down to firing duty. And in charge of the gun, quite cool and efficient, sending the men through the paces which I thought I'd have to take charge of, was Sergeant Shane!

He saw me, nodded gloweringly.

"Took long enough to make your station, Corporal," he snapped.

I was too damned flabbergasted to speak. I could only gaze open mouthed at him in astonishment as I hurried to my range-finding post at the side of the gun.

And then, moments later, with Sergeant Shane directing our first barrages, we were in action, blazing forth at the duet of diving Martian space fighter craft.

"Screen," Shane snapped.

"Screen four," I said automatically, as the first of the Martian fighter craft dove down at our gun position and into my *vizascreen* panel sigbts.

"Point," Shane barked.

"Screen tbree," I called. The craft was closer now, ready to blaze loose with the twin atomic cannons in its nose.

"Down point one," Shane barked.

"Screen one," I shouted.

"Fire!" Shane roared.

Our atomic cannon blasted. On my vizascreen sight, the small Martian space fighter craft suddenly spilt into a million atoms as the orange bolt from our gun caught it smack on the nose.

"Direct," I reported.

"Screen," Shane snapped.

I stopped marveling at the human factors that made Shane one of the most stupid persons, and yet the smartest of Marines in actual action, that I had ever known. I caught the outline of the second Martian space fighter ship, blazing down toward us from above the falling fragments of the craft we'd shattered.

"Screen two," I called.

"Point one," Shane barked. Tben: "Fire!"

This hit was a tail job, our orange bolt of flame completely severing the rear of the Martian space fighter ship; it skewed off to tbe edge of my *viza-*

screen wildly, then plummeted downward ablaze.

"Hit!" I reported. "Down!"

I was warming with the heat and the excitement of the battle. Warming, too, with tbe fierce pride of a Marine who thrills at the combat teamwork of his guns and his buddies. Shane was still magnificently unperturbed. This was his crew. These were the men he himself was responsible for. Their success with this gun was his success.

Another, and larger, Martian craft blotted into vision on my vizascreen.

"Target!" I called.

"Screen!" Shane barked.

"Screen four," I called.

"Point three," Sbane called. "Fire!"

Our atomic cannon blasted once more. The Martian figbter craft never knew what hit it. The orange explosion that caught it amidships completely demolished its side gun bubbles. It dropped immediately in flame, split asunder.

"Hit," I yelled. "Down."

THERE were more then, eight more within the next ten minutes. We got three of those. Then we downed a giant of a space fighter for our seventh.

And then there was a lull, no more ships popping into vision on my *vizascreen*. The crew waited tensely, impatiently. Sbane, of course, was coolly blasé. The roar of battle around us was growing fainter and fainter.

Two more minutes, and tbe gunfire was only scattered, sporadic. Then, at length, it was silenced completely. I wiped the sweat from my brow and looked at Shane.

"Got seven," he said casually. "Not bad. But you birds'll have to put in extra hours on accounta those five misses."

I shook my head in silent amazement. The big blundering blockhead. The show was over, and he tbought everything was going to be just the same now as it always was. Didn't he realize what he'd done? Didn't he have any idea this treacherous attack was his own dammed stupid fault? Didn't he know he was through, washed up—that even this magnificent gun record he'd just established wouldn't mean a thing in another two hours?

The "All Clear" sounded then. I've never heard a wail tbat sounded as much like music. . . .

"The Martian fighter space craft that slipped through the atomic mine fields," our Admiral, Old Ironpants, said three hours later, "were merely part of a space armada of close to a thousand of such ships. It was only to be expected that some of tbem would blunder through by luck. However, only fifteen of these did so."

We were standing in the stateroom of Old Ironpants, Shane and I. The Admiral, his hatchet face wreathed with smug pride, sat with the stern old duck from the Federation Secret Service. Even the stern old duck seemed complacently relaxed for an instant.

"It seems," the Admiral went on, "that your remarkable gun crew accounted for seven, or almost half, of the enemy sbips that did slip through. I consider this excellent for your record, Sergeant Shane. The proper commendation for you and your crew will be made publicly within the next week. Now that the Federation is formally at war with Mars, crews of your type can't go unrewarded."

STILL dizzy from the mad reversal of fortune, I heard Shane, bursting with ego, say, "Thank you, Sir."

The stern old duck from tbe Federation Secret Service broke in, then, to heap fuel on Shane's already blazing conceit.

"You took quite a chance, Sergeant, in handling that Martian espionage ring yourself. After all, we of the Secret Service have to make a living, you know. And if, in the future, you and other members of the armed forces take to breaking up spy rings on your own hook, we'll be out of jobs."

Sergeant Shane gave a falsely modest laugh. "It wasn't hard, Sir. I suspected they wanted them atomic mine positions, and so, when I figured they were about ready to pull their fast Martian sneak stuff, I gave 'em false positions to go by."

The stern old Secret Service duck beamed. "It was fortunate that Clenoka and his spies, escaping in a space launch *spaceradioed* those false positions to the Martian space-raiding fleet waiting to pounce on us. The dirty devils blew themselves into eternity trying to get through the atomic mine positions that had been changed."

Sergeant Shane nodded proudly. A grin splitting his ape-like mug. I was still too stunned to chime in with even a word.

And don't think that little bit of work won't be brought to the Attention of the Federation authorities, with additional recomendation for citation," the stern old duck declared.

"Thank you, Sir," Shane declared. He was a cat rolling in cream. "I only seen my duty and performed it."

"And as for you, Corporal," the Secret Service duck said, "we will forget the break you made from our custody, only under previous considerations, and the fact that you were answering your call to emergency duty."

"Thank you, Sir," I managed weakly.

We left, then, for which I was just as glad. Another ten minutes of that and my knees wouldn't have held me up any longer. Sergeant Shane strutted along beside me, lost in a cloud of lofty self esteem.

"Cut it out, Shane," I growled. "You're nothing but a lucky bum and you know it."

Shane flushed, stopped. "Wbatdyuh mean?" he demanded.

"You know what I mean. You weren't wise to Clenoka's being a spy when you took that money out of the bank."

SHANE looked guiltily right and left, then seeing we were beyond betraying earshot, he said, "Okay, I wasn't wise then. And I hadn't been wise to him when I was piloting him and his launch through the mine fields the times before. But I did get wise to him that last time. You don't think I'm a sucker, do you?"

"I won't answer that," I said. "It's beyond question." Then I added, "What made you wise to Clenoka, if you really were, that last time?"

"He wouldn't take my money," Shane said. "And he didn't want me to go along with him to look at the asteroids. He said he had to go out and look at them himself to check up on some things."

"And that's wbat made you suspicious?" I asked.

"Sure," Shane said. "Anyone who doesn't want to take my money should certainly be suspicious."

"Maybe," I said, marveling at the snarled cogs in my chum's thinking machine, "you've got something there."

"Certainly I have," Shane said indignantly. "I had a hunch that he wasn't going to let me in on that good real estate deal after all. I had a hunch he wanted to take somebody else out to look at them asteroids. Even after he promised me he'd let me buy in on them!"

I could only shake my head. "And

then," I managed at last, "you decided to prevent him from shoving you out of the real estate deal, eh?"

Sbane nodded vigorously. "He couldn't double-cross me. I'm no dumbbell. He told me he was going out to look at them asteroids alone, and that if I'd give him the day's map of the mine field, he'd be able to pilot his space launcb tbrough without my help."

"And so you decided he was going to take some one else out there, to sell them the asteroids he'd promised you, eb?"

"Sure," said Shane. "So I figgered I'd fix it so he couldn't get through the mine field to show them asteroids to no one else. I gave him a map three days old. I knew that would stop him."

I had a vision of the Martian Clenoka, working by an incorrect map, *spaceradioing* the same useless map to his country's fleet waiting outside the harbor. The vision also pictured Clenoka and his staff in the space launch, trying to pilot themselves to safety with that inaccurate map. I had another vision of Clenoka's launch ploughing headlong into the first atomic mine it encountered, exploding to bits. The rest of the picture, the Martian raiding fleet, most inaccurately guided, trying to slip in through the mines into the harbor and blowing itself into blaze after blaze, was also there.

AND all because an irate Sergeant Shane didn't want to get hoodwinked out of some fraudulent real estate deal!

"I'm no sap," Shane repeated. "Not a bit. I wouldn't let him pull that wool over my eyes. I knew that would stop him!"

I almost choked at the way he used the word, "stop." As gently as I could, I asked, "Did it ever occur to you, Shane, that 'stopping' Clenoka that way would hlow him into hell and ruin your real estate deal anyway?"

Sergeant Shane considered this. He rubbed his chin with a huge red hand. He squinted thoughtfully. He opened his mouth aghast.

"My God," he exclaimed, "I never thought of that!"

I just looked at him, shaking my head despairingly. Then, at last, I said, "But you really never were wise to the fact that Clenoka and his phony real estate office was nothing but a Martian fifth column front, were you?"

Shane grinned. "I never said I was. That was the Secret Service guy's idea. I didn't correct him. Why should I? After all, didn't I fix the works?"

"Yeah," I sighed in despair, "you fixed the works." I turned and started away. Shane's big paw suddenly grahhed my arm. I looked around. His hrow was wrinkled with the impact of a sudden dawning revelation.

"Cork," Sergeant Shane gasped, "I'll bet Clenoka never really owned them asteroids he showed me!"

I didn't answer. What was there to say?

IT HAPPENED IN SPACE

(Concluded from page 151)

the death penalty." He stepped to the door. "Beamish!" he called. "Come and guard this prisoner. We take off in ten minutes—as soon as I attend to one more detail."

"Detail?" echoed Vannie.

"Get your space-things back on. I'll dig out an overall for myself. We're dropping back to see your fatber."

Jan Conniston woke to the ministrations of his daughter and Zack Harpe. He rubbed his eyes, touched the bruise on his head, scowled. "You got loose,

after all," he fumed at Harpe. "What now?"

He had slept through so much, it would be hard to explain everything to him. Harpe did not try. He only said: "You talked about performing a wedding. One that will provide your daughter with a husband and a guardian. Well, get on with it."

Conniston gazed at him wonderingly, and smiled ever so thinly. He rose, went to his desk, opened a drawer. From it he brought out a prayer book.

"Join your right hands," he said.

« AMAZING FACTS »

By A. MORRIS

DREAMING IN A BIG WAY

THE manager of a large circus recently disclosed that elephants are often subject to nightmares. When having a nightmare, the elephant will trumpet and bellow unusually loud and is sorely distressed. During the nightmare, the elephant loses a great deal of weight and it often takes a month or even a month and a half of careful feeding to help him regain the weight. After a nightmare, some elephants will indicate their desire for hay by pushing their keepers toward the hay rooms with their trunks. One elephant would pick up some old hay in her trunk, hold it out to her keeper, and "beg" for more.

LAUGHING WHIPPED CREAM

"LAUGHING gas" can be put to a new task besides being useful to the dentist. Nitrous oxide, better known as laughing gas, is injected into cream under high pressure. By this process cream can be expanded 450 per cent—two quarts of delicious, smooth whipped cream from one pint of cream. The whipped cream is harmless, odorless and very economical.

THE OLDER THE BETTER

SEVERAL years back there was quite a scandal because stale diphtheria antitoxin had been administered to a child stricken with diphtheria. The child later died. The "old" antitoxin was blamed in this case.

The U. S. Public Health Service has examined "aged" antitoxin and reports that it is perfectly safe. True, freshness is very essential in serums and vaccines, but not true in the case of diphtheria antitoxin. In fact, certain doctors will only use antitoxin that is at least a year old because while still just as effective as fresh antitoxin, the reaction in the body is not as severe.

HAVE A PEPPERMINT PATTY

AFTER that heavy meal, do have a peppermint candy. Scientific tests prove that oil of peppermint is good for the stomach, especially after a hearty caloric meal, as it hastens digestion and empties the stomach an hour sooner. Being a considerate host, after your next dinner party, you'll pass the "mints" to your guests to relieve that "full" feeling.

WATER LILIES FOR "BOSSY"

IF A serious drought should again darken the farmer's hopes of fattening his livestock with healthful alfalfa and legume hays, he may be forced to turn to under-water plants, such as water lilies, for nutrition for his cattle and other livestock.

The neglected weed-choked ponds and shallow lakes offer an excellent substitute. Experiment has shown that these weeds can be dried into a new hay richer in some essential nutrient elements than the ordinary fodders now being used. In our northern lakes are found species of water plants which are practically all rich in mineral content and protein.

WORTH HIS WEIGHT IN GOLD

THERE is one gentleman in this world who doesn't have to watch his diet. In fact, he relishes each and every pound that accumulates on his already fat body. For to the portly Aga Khan, an Indian potentate, obesity is a worthwhile asset. His loyal and devout subjects pay him tribute each year in gold equal to his weight.

THE YOLK'S ON YOU

SCIENCE has now discovered a method of controlling the degree of yellowness in our eggs. The hen's diet is fixed so that she is fed a controlled amount of xanthophyll, the dye which determines how yellow the yolk will be. Xanthophyll is very common and is produced in green cabbage leaves, yellow corn, alfalfa, clover, grass, oats, and rye, all of which are very nutritious for a growing chick.

Recent surveys show that eggs with a medium yolk are preferred while those with a deep orange or a very pale yolk are not as desirable.

Xanthophyll-control is the farmer's answer to produce eggs with yolks to satisfy the palates of the American public.

"Put me down!" gasped Captain Stinky. "You Martian scoundrel!"

CAPTAIN STINKY

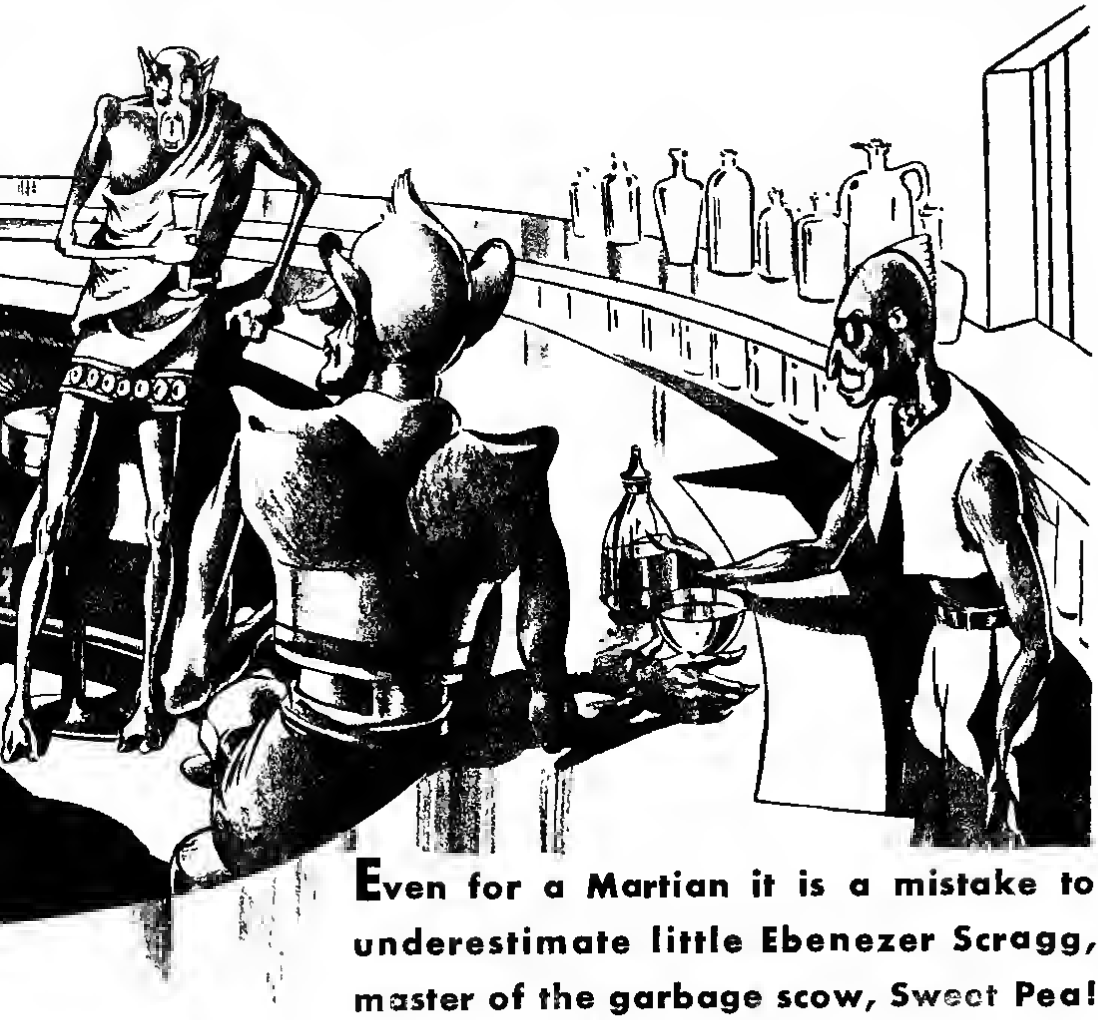
By GERALD VANCE

THE small smoky space-port saloon was jammed with its usual crowd of battered humanity, when Captain Ebenezer Scragg, Master of the garbage scow, *Sweet Pea*, shoved open the swinging doors and shouldered his way to the bar.

He managed to find six inches of space between a huge-shouldered Martian and a slight Venusian whose pale green features were flushed from the vile concoction he was drinking.

When he attracted the attention of the bartender he ordered a drink and downed it neat. Smacking his lips he turned and nodded to several of his friends and acquaintances who were scattered about the dingy room.

The captain was a gnarled, whiskered little man with bright snapping eyes and a stubborn outthrust chin. A prominent Adams apple bobbed up and down his scraggly neck. The scant hair that stuck obstinately up from his



Even for a Martian it is a mistake to underestimate little Ebenezer Scragg, master of the garbage scow, Sweet Pea!

scalp was a horrible shade of red that was a cross between orange and pink. His clothes—blue trousers and windbreaker—flapped about bis skinny ungainly frame with every motion he made.

A Martian space tar lolling drunkenly at a table looked up at the Captain and a slow grin split his pumpkin-like face.

"Long time since I see,' he said jovially. "How has been my friend, the Captain Stinky?"

Captain Ebenezer Scragg glared at the Martian.

"Listen, you overgrown lobster," he cried, in a sbrill voice that cracked slightly with rage, "if you call me that name again I'll bust a chair over your gol-danged head. Just because I'm master of garbage scow, don't mean I ain't entitled to some respect. I'm Captain Ebenezer Scragg of the *Sweet Pea,* and if you've got anything in that blockhead of your'n that you want to discuss with me, wby call me by my name and rank."

CAPTAIN EBENEZER stopped because he was out of breath.

Glaring balefully at the Martian, he was about to turn back to the bar, when a general wave of coarse laughter swept over the saloon.

A drunk in the corner stood up and struck a pose.

"I'm Captain Ebenezer Scragg," he cried, between hiccoughs, "Master of the *Sweet Pea,* the dirtiest, stinkingest garbage scow between here and Earth."

Captain Ebenezer's face turned as red as his hair.

"Leave her name out of this," he shouted shrilly. "The *Sweet Pea* don't need any apologies, not to drunken bums like you, anyway. You couldn't get a berth on her the best day of your life, if you ever had one. I wouldn't have you for nothing a month."

The drunk chortled triumphantly.

"You ain't got enough money to get me aboard your scow," he jeered.

Because this statement was perfectly true it struck home to the Captain's most vulnerable spot—his pride.

He knew that not one man in the saloon would accept a berth on his ship. The garbage scows that met the great space liners and removed the accumulation of refuse the liners collected on their three and four week trips, were regarded as beneath the dignity of any respectable space tar.

Captain Ebenezer's contract with the space liners provided that he remove their garbage at pre-arranged meeting places in the void. Occasionally he was able to sign on a few seamen to help him, but more often he had to do the complete job himself. In fact it had been months since be had been able to recruit the remnants of a crew.

IT SAVED him money but it doubled his work. And such work! It was humiliating for the Master of the scow to be forced to climb over the refuse in the hold to open the garbage chutes. He could stand that, but when he had to grab a pitch fork and spread the cargo about to keep it from piling up at the chute door, his sensitive, dignity-loving soul wilted.

The fact that he was master of his own, ship duly commissioned and authorized, was ashes in his mouth with the realization on that he was held in a sort of pitying contempt by the rest of the spaceman at the port.

He would bave cheerfully cut his tongue out before admitting that he cared for the opinion of other masters and space tars. Still, deep in his tough old heart, he cared very much.

The ribald laughter that was sound-

ing in the smoke-filled, dank saloon was as gall and wormwood to bim.

"You bunch of washed-up space bums," he snarled, as the noise subsided, "have got a helluva lot of nerve to be laughin' at me and the *Sweet Pea.* We do important work whether you swabs realize it or not. Tonight I'm meetin' the *Jupiter,* eighteen days out of Earth and headin' for home. What'd they do if I didn't meet her? They'd be in a bad way, that's what."

The big Martian looked up blearily.

"The *Jupiter* is one hell of a fine ship," he said. "I shipped on her for many trips. She is a real liner, not like your garbage scow, Captain Stinky."

Captain Ebenezer's jaw stuck out angrily.

"I'm warnin' you for the last time about that," he said shrilly. "I got a name, and you know it. If you shipped on the *Jupiter* you should know how to address a space ship's captain. They probably threw you off the *Jupiter* because they got sick of havin' a dumb, drunken bum ruining the looks of their ship."

The big Martian stood up, his buge red face twisted in rage. With one step he was beside Captain Ebenezer, and with one mighty hand he jerked him off the floor and held him suspended in the air.

"Why I leave the *Jupiter,*" he growled, "is my business. "You keep your nose clear and you stay healthier."

CAPTAIN EBENEZER'S fists were flailing frantically, but futiley, at the mammoth Martian. His wizened, monkey-like face was as red as a ripe tomato.

"Lemme down!" he howled wrathfully. "Just lemme go, you overgrown ox, and I'll knock three kinds of blue tar out of you."

The Martian held him at arm's length, four feet above the floor. With a motion of his wrist he shook the Captain until his teeth chattered together like dice.

"Captain Stinky," the Martian jeered, "maybe this will teach you a little lesson."

Still holding the Captain suspended in the air he lumbered to the door. With one heave he tossed Captain Ebenezer's small figure through the swinging doors onto the sidewalk that flanked the saloon.

Captain Ebenezer picked himself up slowly. Every bone in his body ached and he felt as if he had collided with a runaway meteor. He dusted his clothes with what dignity he could muster and glared at the round face of the Martian, leering at him over the top of the swinging doors.

"All right, you big baboon," snarled Captain Ebenezer, "let that be a lesson to you."

With that illogical but somehow face-saving outburst, Captain Ebenezer limped away.

AN hour or so later, still limping and bubbling with rage, Captain Ebenezer reached the lower end of the great space wharf where his garbage scow, the *Sweet Pea,* was moored.

The wharf was formed in the shape of a vast semi-circle. On this particular asteroid—one of the principal way stations on the Earth-Jupiter circuit—the center of the semi-circular wharf was reserved for the great liners and fighter and observations units of the United Space Navy.

The tapering ends of the wharf, unligbted and for the most part neglected, were used by cargo ships, space tramps and the more humble type of space-spanning craft.

Here the *Sweet Pea,* a squat ugly scow, almost as wide as it was long,

moored. A *glassicade* tower on top of tbe deck served as Captain Ebenezer's "bridge," and it was the one square of space in the wbole universe most sacred to him.

It was dark as the Captain limped to tbe wharf office to have his clearance papers countersigned. The clerk, a natty ensign from the naval school, frowned importantly at the papers Captain Ebenezer thrust on his desk.

"Hmmmm," the ensign tapped a pencil against his front teeth, "everything seems to be in order. Hmmmm."

Captain Ebenezar revelled in the formal ritual that accompanied every leaving.

"Thank you, sir," he said, saluting with what he hoped was smartness and dash.

The ensign checked a form, told the captain to leave when he was ready and went back to otber matters. Captain Ebenezer saluted again and walked from the office stiff as a poker.

Outside, he limped up the walk to tbe open deck of bis ship. The brief contact with authority and formality, and the realization that his passion for dignity and respect were appreciated by someone else brought back his customary feeling of cocky importance.

Captain Ebenezer descended to the tiny cabin which he shared with the only other crew member, a Venusian, whose duties included chart-making, visi-screen recording, and the other semi-tecbnical matters which Captain Ebenezer foggily understood.

"Mono!" he called sharply. "Dang it, wbere in thunderation are you?"

"Good evening, Captain," a soft voice said, and Mono stepped out from behind a curtain whicb separated bis section from the captain's.

MONO was small and slight, with the typical greenish skin of his planet, and a habitually blank expression which was peculiarly bis own.

He stood at attention and saluted.

Captain Ebenezer returned the salute solemnly.

The relationship between the two sole members of the garbage scow's crew was unbendingly formal half of the time, and the other half it would have been difficult to tell who was in command.

"We're ready to leave," Captain Ebenezer announced, "is everything in order?"

"Everything has been checked, sir," Mono said. "The ship is set on course and the propulsion charges have been lowered into the aft rocket tuhes. Is there anything else, sir?"

Ebenezer scratched his scraggly cbin. If Mono said things were ready that was that. Still, as the master, he had to make a bluff of excercising a careful supervision over the destiny of the ship.

"Checked everything, eh?" he asked.

"Everything, sir."

Captain Ebenezer pulled a thoughtful frown over his face for an instant, then he beamed.

"Well, let's goin' you sleepy son-of-a-gun," he chortled. "Blast away! I'll he up in the bridge watching the harbor marker lights go hy. Snap to it!"

CAPTAIN Ebenezer could feel the rhythmic throbbing of the rocket exhausts shuddering through the ship, as he climhed the short flight of steps that led to the *glassicade* bridge.

The small bridge-room was dark, except for the light over the chart table and the silvery glow of the visi-screen.

Everything was spick and span, clean and ship-shape, and Captain Ebenezer's eyes delighted in the order and neatness. This was his baven, his recluse, his paradise.

As he stepped forward into the room to inspect the charted route of the trip, two things happened.

The *Sweet Pea* blasted off, void-bound, with a deep satisfying roar from her old, laboring rockets, and—a heavy, powerful hand fell on his shoulder, jerking him about with a neck-twisting snap.

"What in thunderation!" he exploded furiously.

Then his eyes widened incredulously as he recognized the huge shape that faced him from the dark corner of the bridge-room.

The drunken Martian who had thrown him out of the waterfront dive a few hours before chuckled deep in his throat. The sound was not reassuring.

"So lucky for me," the Martian said, "that I happen to be going by your way."

Captain Ebenezer's first amazed shock faded away leaving him explosively angry. Never in his command of the *Sweet Pea* had anyone but Mono set foot on the bridge, and to have this hallowed spot desecrated now by this lumbering, drunken Martian was nothing short of sacrilegious.

Ebenezer drew himself up to his full five feet, four inches. Confidence flooded through him as he felt the familiar objects of his little kingdom lending him inanimate but nevertheless moral support.

"Take your hands off me," he snapped at the Martian, "I'm in command here and you're breaking about sixty five space regulation laws by trespassing in my chart room. If you want me to be lenient when we get back to harbor you'd better do as I say and be lively about it."

The Martian grinned evilly and his powerful, banana-thick fingers tightened on Ebenezer's shoulders until he almost fainted with the pain.

"You do like I tell you," he said. "When you meet the *Jupiter* I board her while you take on the slop, Captain Stinky."

"You're crazy," Captain Ebenezer gasped, so astounded that he hardly noticed the offensive nick-name. "They'll catch you sure."

The Martian smiled.

"No. I know the *Jupiter*. Many trips I make with her. I know where to hide for the time it takes to reach Jupiter. There I be safe. The space police from earth want me but they will never find me on that big planet. It's the only place I can go, and this is the only way I can get on the ship, *Jupiter*. I have no papers, no passport. If I stay back on the station they will find me in a little while, so I do not stay. I go with you!"

"What are you wanted for?" Captain Ebenezer demanded.

"What difference it make?" the huge Martian scowled and shook the little captain like a terrier shaking a rat. "You ask too damn many questions. Mayhe I kill a man. If you don't shut up damn soon mayhe I kill another."

HE opened his mouth and spat a thick stream of dirty gray *leeka* juice onto the immaculate floor of the bridge.

"One more makes no difference," he chuckled.

Captain Ebenezer was forced to do the only possible thing under the circumstances.

"All right," he grumbled. "But take your meat hooks offa my shoulder. How'd you expect me to run my ship?"

The Martian released him with a grin.

"You sensible," he said.

For the next two hours Ebenezer pored over the chart, kept a close eye on the visi-screen, and the Martian

stood directly behind him, only turning his head to squirt an occasional mouthful of *leeka* juice to the floor.*

At the end of the two hour stretch the great liner *Jupiter* was visible on the visi-screen, and fifteen minutes later it could be seen by the naked eye, a long gleaming oblong in relief against the eternal night of the void.

She was standing by for her meeting with the *Sweet Pea* and the mighty signal beacons on top her upper structure were pointing long fingers of light through the blackness of space.

"Why is that?" the Martian growled suspiciously.

He had pulled a heat-ray gun from his belt and was jabbing it nervously into Ebenezer's spine.

"Signalling," Captain Ebenezer answered.

"What she say?"

"They're giving us their exact position," Ebenezer explained ungraciously, "and they want the *Sweet Pea* to lock against refuse chute number one on the starboard side. I gotta answer 'em and tell 'em I got the message."

"No answer," the Martian growled. "Don't make lights at all. You try trick me and I break your head open."

"If I don't answer," Captain Ebenezer said, "they'll surely be suspicious."

The Martian shoved the gun into his back viciously.

"No try tricks," he said savagely. "Tell *Jupiter* Okay. If you signal any more I kill you. What is signal for 'O'?"

"Two blue flashes."

" 'K'?"

"One red."

"Good. Send message," the Martian snarled.

CAPTAIN Ebenezer sighed despairingly. With the heat-ray gun almost jabbing through him there was nothing else he could do. He flashed the message twice and the Martian's small eyes watched every motion intently.

In a matter of minutes the *Sweet Pea* was sliding alongside the mighty space giant, *Jupiter,* and when the pneumatic locks clamped the tiny garbage scow into place at refuse chute number one, she looked like a barnacle clinging to the side of a sea going ship.

The heat-ray gun was digging into Ebenezer's back again.

"We go below," the Martian said. "I know what to do now. At the top of the *Jupiter's* garbage chute is storeroom where I can hide. After you take on garbage I slip up the chute. You understand?"

Ebenezer understood perfectly. After the garbage had been collected the Martian would leave, hut he certainly wasn't going to leave any witnesses behind. The *Jupiter's* automatic ejector apparatus would hurl the *Sweet Pea* clear of the gravitational attraction of the bigger ship, and Ebenezer had no douht that the crew of the *Sweet Pea* would be dead by that time. The Martian would burn him and Mono into ashes before leaving, and then when the *Sweet Pea* was set adrift, the Martian would be perfectly safe.

Captain Ebenezer felt a slight tremor travel through his body. Prospects weren't exactly pleasant.

In silence he led the way to the hold. Mono was standing at the wide side doors through which the garbage was transferred from the liner. When he looked up and saw the Martian and saw the gun that swung slightly to cover him, his face remained hlankly expressionless, but a slightly worried glint touched his pale eyes.

* Leeka Juice: A berry native to Venus and possessing highly narcotic qualities. It was widely used by many of the degenerate tramps and human derelicts of the universe.

"Is everything all right, sir?" he asked quietly of Ebenezer.

"Do they look all right, you silly simpleton," Captain Ebenezer exploded. "Do you think this ape with the gun is a new mascot I picked up?"

"Shut—up!" The Martian spoke each word separately with a flat deadly emphasis on each syllable.

Keeping the gun trained on them the Martian lumbered to the panel doors of the garbage chute. The doors of the *Sweet Pea* had already slid back and the gleaming hull of the *Jupiter* was visible.

"When the doors open, I go," the Martian said. "You stay here with the garbage, Captain Stinky. And you too," he growled at Mono, "both of you stay with the garbage."

"Yes, sir," Mono said meekly.

The gleaming metal chute doors of the *Jupiter* opened suddenly with a metallic click. The Martian swung about expectantly.

Captain Ebenezer tensed himself for the searing bolt he knew would come—then a sudden triumphant howl broke from his lips.

FOR from the darkness of the garbage chute three husky Earth spacemen suddenly appeared, and before the huge Martian could raise his gun they dove at him in an avalanche of efficient concerted action.

Two landed on his back and the other hit him at the knees with a savage swipe.

With an enraged bellow the Martian shook his massive shoulders, dumping two of the spacemen to the floor. His big fist descended like a mallet on the other spacemen as he twisted to bring his heat-ray gun around on the two men who were crawling back to their feet.

It was at that stage of the affair that Captain Ebenezer entered the fray. He had grabbed a heavy iron spike from the floor at the first second of the attack, and now he sprang forward, an anemic avenger, driven to heroic heights by his long repressed rage.

"Captain Stinky, is it?" he screamed.

With all the strength in his skinny arms he brought the heavy spike down on the Martian's big head.

"Spit *leeka* juice on the floor of my bridge, will you?" he howled. "Take that! And that!"

One—two—three!

The three blows put an end to things. The Martian's knees sagged and he fell heavily forward on his face.

Captain Ebenezer almost fell on top of him, but his righteous indignation sustained him. The spike fell from his limp hand and he stood panting heavily, legs spread wide.

"Captain Stinky, eh?" he gasped.

With poetic revenge he pursed his lips and sprayed a stream of honest tobacco juice over the sprawled body of the Martian. . . .

VICE-ADMIRAL Hartman, master of the *Jupiter*, received Captain Ebenezer of the *Sweet Pea* in his sumptuously furnished office. Rising, the Vice-Admiral saluted, then shook hands gravely.

"It's a privilege to have you aboard, Captain," he said. "Permit me to congratulate you on your splendid work. There might have been serious repercussions if we had allowed the Martian to make an illegal entry on Jupiter. When you answered my signal with 'O.K.', I was instantly suspicious. In the years our ships have been meeting I have always been happy to note that your signal replies are always according to explicit regulations. This informality tonight put me on the alert and I sent three of my men down to

(Concluded on page 260)

VENUS—World of Mystery

by WILLY LEY

How do the planets really look? Here is a scientific and authoritative picture of the Venus landscape

NO. 3

IT IS, of course. tiresome to call each and every planet a "planet of mystery." But it is an unfortunate, though intriguing, fact that there are only a very few that do not offer more than one major mystery while every one of them is practically submerged in minor mysteries. The major mysteries include the true depths of the atmosphere of the large outer planets, the "canals" of Mars, the "streaks" or "rays" of Luna and the origin of the asteroids. Among the minor mysteries the surface temperature on the night side of Mercury may be mentioned. And in the case of Venus . . . well, here's where troubles come in dozens.

Generally speaking Venus is the planet that is most similar to Earth. It has about the same volume (0.876), it has about the same mass (0.826) and very nearly the same density, 0.88 if compared to that of Earth, or 5.09 if compared to that of water (that of Earth is 5.52). Its diameter is 7500 miles (that of Earth 7900) and its surface gravitation is nine-tenths of that on Earth. In short, Venus is another Earth, slightly smaller.

That it has an atmosphere has been mentioned already in the article about Mercury, that atmosphere betrays its existence when Venus moves across the disc of the sun. To produce the observed effect the atmosphere of Venus must be at least as dense as that of Earth, which statement does not exclude the possibility that it may be denser as most astronomers believe to be the case.

Before ancient astronomers learned that the blinding Evening Star and the equally bright Morning Star were, in reality, the same planet, Venus had two names, *Hesperus* when in the evening sky and *Phosphorus* when in the morning sky. The light of Venus is bright enough to cast a shadow and even bright enough to he seen in the daylight sky, in fact, you can see Venus almost at any time during night or day (unless the planet is either at the point nearest to or farthest from Earth) if you only know where to look.

But this brilliant light is one of the reasons why observers have such a hard time with the second planet. Even in small telescopes the image is so blinding that little can be distinguished.

Another reason why observation is so difficult is the position of Venus between Earth and sun. Just when the planet is closest to us we look at the night side that is not illuminated by the

View of a typical Vanusian landscape. Incessant rainfall, combined with strong winds, sweep the planet beneath the perpetual cloud envelope, and visibility is good in spite of volcanic activity, which causes local fog banks

sun. And when, theoretically, we can see the full disc of the daylight side we have to look not only across the distance from Earth to Venus but across all of Venus' orbit as well and then the still more blinding sun is more or less in the way.

And, just to make things a little harder there are the clouds of Venus. Nobody ever saw any surface feature with certainty. When the planet is at eastern or western elongation it shows phases like that of the moon. This was, incidentally, the first major triumph of the Copernican system; Copernicus had predicted that Venus would show phases if our eyesight were better. When the telescope came the prophecy was proven correct. There are some irregularities in the terminator (the technical name for the "shadow line" or border between night and day) that indicate high mountains, mountains far surpassing the highest and most massive mountain ranges on Earth.

But markings on the surface of the planet inside of the illuminated zone are absent. And even if present they are neither distinct nor reliable, contrary to all the wishes and prayers of astronomers who would like reliable markings to determine the period of daily rotation.

It is not amusing to wonder about this very important point, especially not in the case of a planet so much like Earth in every other respect. There exists not the slightest uncertainty about the orbit, it is the most perfect orbit in the solar system, almost a mathematical circle, 67,200,000 miles from the sun. But there is no certainty at all about the length of the day. For a long time observers had silently as-

sumed that the day of Venus was about the same as the day of Earth. But then Schiaparelli came and claimed that many years of patient and careful observation had forced him to conclude that Venus, like Mercury, always turned the same hemisphere toward the sun, in other words, that Venus' day was the same as Venus' year, 255 of our Earth days. Another observer, Belopolski, also known to be good and careful, contradicted Schiaparelli and said that the daily rotation of Venus, though he was uncertain as to the exact period, had to be inside the limits of between 20 and 36 hours.

MEANWHILE Pickering suggested another possibility. He had observed what he took to be a vertical movement of faint markings which necessitated a ninety degree tilt of the rotational axis. Like Uranus, Pickering said. If this were true an observer on Venus would see the sun move in circles on the daylight sky, circles coming closer and closer to the horizon as the year progresses until the sun would finally disappear not to rise again for a half year, 128 Earth days. Conditions on Venus would then resemble—at present only astronomical events are under discussion, not the topography of the surface—those of the arctic and antarctic regions on Earth, long periods of continuous day and night with short intermediate seasons of alternating daylight and night.

The hypothesis that Venus' axis was tilted to such an extent was greeted with scepticism by the majority of astronomers and it seems that it has been given up completely in the meantime. Most astronomers feel that a rotation resembling that of Earth would best produce and maintain such a perpetual thick veil of clouds as Venus evidently displays.

The suggestion that the blinding white surface is caused by a blanket of snow has once been made, but certainly does not deserve a discussion. The calculation of the amount of sunlight received by the planet shows that the surface temperature should be around 65 degrees centigrade or 149 degrees F. This is admittedly a bit too warm for comfort for almost anything living on Earth—although not beyond the limit where adaptation would be impossible. But an atmosphere cannot only warm a planet, as it does with Terra; it might also shield. The clouds of Venus reflect, as we know, seven-tenths of the light received, only three-tenths penetrate through them. It is a safe guess that the average temperature underneath those clouds will be subtropical but not surpassing the 100° F. mark. Some scientists are even ready to believe that it might be cool, comparable to the northern parts of the temperate zone in summer, without the winter, of course.

But whether subtropical or cool, there is no doubt that it will be wet. Such a picture, a moderately warm and very wet climate, does not appear so very strange to our eyes; we see examples of it on our own planet in quite a number of places. A dense vegetation, dripping water from every leaf, standing in knee-deep water with occasional little "islands" rising from the morass, growing luxuriantly if it can only get a foothold, fighting for light and dying quickly if it fails, to fall prey to those forms that prefer dead organic matter for food.

AND all this takes place not under a bright and pale tropical sky with an oversized sun, but under a sky eternally covered with heavy dark clouds, clouds that pour an almost ceaseless warm rain into the open sea and the

stagnating water of the swamps.

The leaves of those plants will be large, to hetter utilize the diffused light, but they will not necessarily be green. Our plants are green because our sky is blue. In those regions on Earth where the sky is green, 20 fathoms under the surface of the ocean and deeper down the color of plants changes to yellow, to brown and finally to red. The leaves of that rainy forest under the dark sky of Venus may be varicolored, green is not ruled out, but a pale shade of brownish yellow is likely too.

The forests at the seasbore will not be flooded very noticeably, there are only weak solar tides. They are several times as strong as a solar tide on Earth, but they are not the high tides that are produced by a nearby moon. In old astronomical records a moon of Venus is mentioned; Fontana claimed to have seen it in 1645, Domenico Cassini in 1672 and again in 1686 and Short as late as 1740. But since then it has never been seen again with much better instruments—and it should show beautifully when Venus is in transit—thus we have to conclude that those old observers hastily mistook a star for a moon.

The picture of the rainy forest could he maintained even if it should be proved conclusively that Schiaparelli was right, because even with a 255-days "day" Venus would not resemble Mercury. Tbere is too much atmosphere and too much water. Life would not be restricted to a "twilight belt" (which would have the respectahle area of twenty million square miles) hut could spread over most of the planet. A "heat pole" in the center of the daylight side would also be the center of a continuous rising current. This upwind would spread out radially at a moderate altitude and move across the twilight belt toward the "cold pole" in the center of the night side. Since the air that arrives there has to go somewhere it would again spread out radially and flow back to the heat pole, hut this time close to the surface.

This circulation would result in the curious condition that "the weather" in any particular section would be always the same. The temperature would not change except by fractions of a degree, the wind would hlow always from the same direction with the same force, differences in harometric pressure will adjust themselves within an hour or less. The important point is that the heat pole will not be warmer than the hottest parts of tropical Africa (probably less so) and the cold pole will not be able to compete with Antarctica.

The general climate will be "cool, windy and rainy," not exactly pleasant, hut bearable. If Pickering were right the general picture would he about the same, with a periodic wandering of the two climatic poles around the planet, from one of the geographic poles to the other.

IT IS still more likely, however, that the rotation of Venus is more like that of Earth. It must be slower than twenty hours, otherwise it could bave heen determined spectroscopically; Belopolski is probahly right with his 30-bour period. There are a number of reasons that speak against Schiaparelli, mainly the fact that the Sun is not powerful enougb anymore at the distance of Venus to stop the rotation of a planet of that size. With a 30-hour period the surface of Venus would present itself as a rainy landscape with strong winds and an average temperature of 115° F. during the day and, say 95° F. at night. If it does not rain visihility will be fair, like a dreary day on Earth, with a cloud ceiling of about a mile, the thickness of

(Concluded on page 193)

The Man Who Was Two Men

by E. K. JARVIS

It was an incredible secret this crazy inventor claimed to have solved. The way to overcome gravity

With crashing force the tiny model smashed into the floor

The Man Who Was Two Men

by E. K. JARVIS

It was an incredible secret this crazy inventor claimed to have solved. The way to overcome gravity

"BUT you will have to wait your turn, sir," my secretary protested.

Her voice sounded strained. The never-ending pressure of work accounted for that. Everybody in Washington, from the man in the White House on down, was working day and night, trying to buy back the precious minutes so carelessly wasted in the golden years, trying to barter blood and sweat for time. This was especially true in my division of the war department.

The door to the waiting room was open a crack and I heard the commotion start. I knew what was happening. Another crazy inventor had made a discovery so important he just couldn't wait to tell the war department all about it! That's my job. I'm head of the harassed engineers who see the long-haired lads from the tiny machine shops and the hidden home laboratories who think they have discovered something important. The things they bring to us! I've looked at everything from plans for a flying submarine down to ideas for dropping spitting cobras behind the enemy lines. No matter how wacky the idea is, we see the inventors just the same. We never can tell when some timid little guy, with dandruff on his collar and dreams in

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his eyes, will come tip-toeing into the office with the idea that will win the war!

Jim Vaughn, an engineer, and officially my assistant although he knows more about electrical engineering than I ever hope to know, was sitting beside my desk. We were deep in the plans for a new type of storage battery that didn't use acid and probably didn't store electricity either. When the commotion started in the waiting room, Jim looked at me and groaned.

"When this war is over,' he said firmly, "I'm going to move to a land where all inventors are throttled as soon as they're born. I'm going nuts!"

"Me and you both," I said.

Wham! The door of my office was kicked open and over the protests of my angry and frightened secretary a man came striding into the room.

"My name is Welty," he said, glaring at me. "Ricbard J. Welty. Are you William Edgar?"

Most of the inventors who come to us look as if they need a square meal. Also, they are usually shy and reticent. There wasn't anything shy about Welty and if anything he looked over-fed. He was a big man, six feet or better, with a strong voice and a commanding bearing. His chin was decorated with a pointed beard, he bad heavy black sideburns, and he was wearing, of all things, a wide-brimmed black hat and a long black cape. A fawn-colored vest, pin-stripe trousers, and spats over patent-leather shoes completed his clothing. To me, he looked like a barker on vacation from his post in front of a medicine show and at any moment I expected him to open the heavy suitcase he was carrying and start trying to sell me some Indian snake oil.

"Are you William Edgar?" he repeated, his eyes snapping. "If you are, say so. But don't waste my time."

"I'm William Edgar," I said. "And if I am wasting your time, it is scarcely my fault."

Looking past bim, at my secretary, I asked, "Is this gentleman next on the list of appointments?"

"No, sir," she said. "He isn't. He doesn't bave an appointment at all. He forced his way past me. Shall I call the police?"

She was hot and I didn't blame her. I was getting hot myself but I couldn't afford to show it.

"If you will see my secretary, she will give you an appointment. Others are also waiting to see me and she will give you an appointment as soon as possible. Is that satisfactory, Mr. Welty?"

It damned well better be satisfactory. It was tbe best I could do. Everybody who comes to this office is seen.

"It's not in the least satisfactory," Welty answered. "I can't wait around here until some little dime a dozen clerk decides to see me. My time is valuable."

Even more than what he said, the way he said it got under my skin. I didn't mind too much being called a dime a dozen clerk for I know I'm a mighty small cog in a mighty big machine. The wheels of the war department would go right on turning without me. My face probably got red but I held my temper.

"I'm sorry, Mr. Welty. We're undermanned and overworked. You will have to take your turn."

MY VOICE may not have been cold enough to freeze an iceberg but it would certainly have frozen icicles. I expected it to put the chill on this barker.

It didn't. He looked a hole througb me. "Buster," he said. "Do you want to win this war, or don't you?"

"Uh—My name is Edgar. Mr. Edgar, in these circumstances."

"Okay, Mr. Edgar. You still haven't answered my question. Do you want to win this war, or don't you?"

One thing about this drip, he kept pitching. The tone of my voice would have curled the whiskers of an ordinary mortal; but not Welty. He came back for more.

"Yes, I want to win the war," I said. "When shall I advise the general staff that you will take care of winning the war for them?"

That should have stopped him. It would have stopped me. It would have stopped a Congressional investigating committee. It would have stopped the FBI long enough for the boys to take a couple of deep breaths. But it didn't stop Welty. It just made him look thoughtful.

"You can tell the big shots we can do it in six months," he said, after a moment's thought. "We might do it in three months, but to be on the safe side we had better plan for six. Always on the safe side, that's me!" he laughed.

I don't know why I put up with this lad. I don't know why I didn't throw him out of the office, or call the cops to do it. I think his colossal effrontery awed me into inaction. Talk about an over-developed ego, nerve, and gall, this man had them! He was the living, walking, breathing image of the great *I*. He left me without the breath to act.

And before I got my breath, he acted.

With one hand, he swept the papers off my desk. Papers, books, folders, drawings, everything—went on the floor. Without as much as a "By your leave—" he swept my desk clean. Inkwells, blotters, my favorite pen, my pipe, and my pipe rack, all of them hit the floor.

Then he lifted the heavy suitcase he was carrying and plunked it down on the desk. Flipping open the catches, he began to unbuckle the leather straps that circled it.

I didn't know I was standing up until Jim Vaughn spoke.

"Easy, Bill," Vaughn said. "Easy does it."

I sank back in my chair, stifling the explosion that was about to take place.

WELTY opened the suitcase. He took out of it what looked like a model of a dirigible. It was about three feet long, beautifully proportioned, with clean lines, and at the rear end it had a system of elevators and rudders similar to those used in a real dirigible. Jutting out on both sides were small engine mountings, complete with tiny electric motors and propellers. Yes, it looked like a model of a lighter-than-air ship, with some differences. No control cabins were slung under it. Rows of tiny ports extended along the sides. Apparently it was designed to carry its passengers and crew inside the ship rather than in control cabins slung under the vessel. It was beautifully made, I grant that much. Real glass had been fitted into the tiny portholes, the little doors were cunningly constructed, and it showed every evidence of being a beloved and carefully built toy. It was complete in every detail, including a wire launching rack into which it fitted snugly.

Welty set it in the wire rack, flung the suitcase aside, took an electric extension cord out of his pocket, examined the switches on a control block built into the cord, and plugged one end of the cord into the model. The other end be plugged into a wall socket.

The door of the waiting room was still open and my secretary, her face white with anger, was standing in it.

Welty noticed her.

"Beat it, sis," he said. "This demonstration is strictly on the quiet."

She slammed the door so hard it made the furniture rattle. Welty calmly walked over and turned the key in the lock. "Can't have any spies getting a peek at this," he said.

"From the way you talk, you must think my waiting room is full of enemy agents," I said.

"Buster," he said, looking at me. "Spies are everywhere."

"My name is not—"

"Easy, Bill," Vaughn said softly. "If he can't produce, I'll help you throw him out, goatee and all."

"After you see what I have here, you'll change you tune, buddy," Welty said to him.

Vaughn had been taking his side! And this was what he got for it! The engineer's face turned red but he held his temper.

"I am going to demonstrate to you the first and only practical method of overcoming the influence of gravity," Welty said pompously.

"Huh?" I was so startled I could only gasp.

"You're going to see gravity nullified," Welty firmly answered, picking up the control block in the extension cord and putting a finger on the switch.

In this department, every dog gets his day, every idea, no matter how wacky, has its turn in court. If a man came in bere and said he had built a ship tbat would fly to Mars, we would look at what he bad.

"Watch closely," Welty said, closing the switch in the control block.

A FAINT hum came from the model. Tiny lights appeared behind the portholes, giving the impression of a ship about to take off. The tiny motors began to spin their propellers.

Nothing else happened. The model didn't lift out of its cradle.

Perplexed, the inventor stared at it. "What is wrong?" he muttered.

Neither Vaughn nor I said a word. I leaned back in my cbair and crossed my hands and began to twiddle my thumbs. Maybe I shouldn't have done that, but I couldn't help it. This guy had forced his way in here, he had insulted everybody, he had pompously announced he had something. Now let him produce. He wanted to show us. We were looking. We weren't seeing anything.

The sight of me twiddling my thumbs seemed to drive the inventor frantic. "I tell you it will work!" he shouted.

"That's up to you, butch," I said. "I'm looking. I'm waiting."

Welty jerked a screwdriver out of his pocket and began to poke into the model. Five minutes later there was a baffled look on his face, sweat was running down his cheeks, and the model was still sitting on my desk.

"If you'll just wait—"

"Take all the time you want," I said. Maybe my tone was off color but I meant what I said. I wasn't going to give him an opportunity to yell his head off that we hadn't given him a chance. In spite of his attitude, if he could make tbat model fly, we were willing to wait. He was still trying to make it work when the office intercommunicator buzzed. I snapped the switch.

"What is it?" I said.

"Mr. Edgar," my secretary's voice came from the box. "There are two men out here after Mr. Welty."

She sounded scared.

"After him? What do you mean?"

Sbe didn't answer, but the doorknob rattled and someone tried to enter. Welty had locked the door. At a nod

from me, Vaughn got up to open it.

"Is somebody after me?" Welty hissed.

Before I could answer he was shouting at Vaughn. "Don't open that door! If they're after me, they're spies! Don't let them in here."

He was too late. Vaughn had already opened the door.

A MAN in a white duck coat and white trousers stood there. It was he who had tried the door.

"Mr. Edgar?" he said apologetically. "Sorry to disturb you, but we're from the Norton Psycopathic Hospital. We're looking for an escaped patient. Ah!" His voice changed as he saw Welty. Calling a command over his shoulder at another white-clad figure who was following him, he stepped into the room.

Welty took one look and dived toward the other door. Jerking the door open, he dived into the hall. The two white-clad hospital attendants ran after him.

It was like a chasing scene in a Marx movie. All I could do was sit there and gape. Vaughn, a silly grin on his face, had backed against the wall. He was gaping too.

There was a commotion out in the hall, sounds of a struggle. It soon ended. One of the hospital attendants came back to the door.

"We put him in a strait-jacket," he said, wiping his forehead. "Sorry if he disturbed you. He escaped several months ago and we've been trying to find him ever since. Somehody who used to know him saw him entering your office a while ago and tipped us off, which is how we got here so quickly."

"Er—thanks," I said. "He disturhed us a little but no real damage was done. What's the matter with him?"

"He thinks he is an inventor," the attendant said. "Harmless, of course, but you never can tell when one of the harmless ones will blow his top, which is why we have been so anxious to capture him." He shook his head a little sadly.

Welty was a nut out of an insane asylum, an escaped psycopath running around on the loose!

"WELL," Vaughn sighed, sinking into a chair after the hospital attendant had gone. "There is always something happening around here. If we're not looking at a perpetual motions machine, we're looking at something equally bad." He glanced at me. "You could do with a drink," he said.

He was right about that. He got the bottle out of the closet. It was good whiskey. We each had one, straight.

"This is the last time any inventor is going to get in here with a model!" I said emphatically. "Some of these days some nut is going to bring in a model of a brand-new bomb he has invented—"

"—And the damned thing is going to work!" Vaughn supplied.

"And we are going to get ourselves blown to hell and gone!" I ended.

At least a dozen times we had decided that no inventor with a model was going to get into the building. We never stuck to our decision, for the ohvious reason that an inventor without a model to demonstrate is like a duck out of water—all he can do is quack.

"Incidentally, what became of Welty's model?" Vaughn asked.

For the first time I noticed it was no longer on the desk.

"Didn't he take it with him? What's the matter, Jim? What's wrong with you?"

Vaughn had half risen out of his

chair. There was a strained expression on his face and the blood had drained out of his cheeks. He looked like a man who was seeing a ghost.

"L—l—look, Bill!" he stuttered.

The left end of my desk was about a foot from the wall. Directly in front of the desk was a bank of filing cabinets, which effectively hid the opening to the left of the desk from anyone looking in the door. Vaughn, his face ashen, was pointing toward this space.

I took one look and my heart jumped up into my mouth. Welty had placed his model on the floor to the left of my desk. Apparently he had utilized our preoccupation when the hospital attendants had entered to hide his invention. I hadn't seen him hide the model, and neither had Vaughn, but the fact remained that he had hid it. There was nothing startling about this.

The startling fact was that it hadn't stayed where he had put it!

Tugging at the electric cable that fed current to it, tiny motors whirring, it had risen to the level of the top of the desk. *It was still rising!* Slowly, a fraction of an inch at a time, it was going up. Fighting against the lines of gravity, it was rising into the air. Up, up! The transformers hidden within it were humming, the lights behind its tiny portholes were glowing.

Without wings, it was rising like a dirigible!

"The damned thing works!" Vaughn gasped.

IT HADN'T worked, when the inventor had tried to demonstrate it. But it was working now. Apparently, when he had hidden it, he had either forgotten to turn off the current or had deliberately failed to do so. Whatever had happened, the model was working. It was rising into the air.

My mind jumped the track. Mentally I was simply not prepared to accept the evidence of my own eyes. My first dazed impression was that I was the victim of an illusion. But both Vaughn and I would not be victims of the same illusion. Welty had said he was going to demonstrate a practical method of overcoming the effect of gravity. When his invention had not worked, and when it was revealed that he was insane, my reaction had been to decide that it would never work. I make no apologies. Anybody else in my position would have reacted the same way.

But his invention was working!

"Do—do you think it's a trick?" Vaughn stammered.

"What kind of a trick?"

"Maybe the model is filled with gas. Maybe it only weighs a few pounds and is lifted by gas. That must be the answer," he decided. "Welty must have built a very light model of a dirigible and filled it with gas. To his addled mind it may have seemed that he had really discovered a method of counteracting gravity. Probably those tiny propellers actually lift the model, and if we turn off the current—"

He was groping for an explanation that would satisfy his engineering mind. His explanation sounded logical to me. I've seen plenty of model airplanes that would fly. Some of them are fitted with tiny gasoline motors and they really get up and go. If this dirigible model had enough gas in it to almost balance the few pounds it must weigh, then the little propellers would provide enough lift to get it into the air.

Vaughn walked around the desk, shoved the filing cabinets to one side, and picked up the control block that held the switch.

"This will prove it's a trick," he said, opening the switch.

The model was about three feet

higher than the desk. It was still rising slowly, still fighting gravity, still struggling to get higher into the air, when Vaughn snapped the switch.

With a thud that seemed to shake tbe whole building, the model nose-dived straight down and hit the floor. It landed with a resounding thud that rattled the windows and shook the furniture. Vaughn looked at me. His lips were parted and he seemed to be trying to speak but he couldn't say anything.

I knew what he was thinking. If that model had been filled with gas, if it had been just a toy, it would not have fallen so rapidly. It would have floated down. And it would not have made much noise when it hit.

Vaughn bent over and picked it up. *Tried* to pick it up. I saw his back muscles bulge through his coat. He lifted it all right, but not easily.

"Holy cats!" he whispered huskily. "It must weigh a hundred pounds. Bill—"

BUT I was already buzzing the inter-office communication, snarling at my secretary. "Get me the—what was the name of that place those hospital attendants came from?—Get me the Norton Psycopathic Hospital! And burn up the wires doing it! This is an emergency!"

I wanted to talk to the head man at that hospital. I wanted to talk to him worse than I ever wanted to talk to any man! While my secretary looked up the number and put the call througb, Vaughn looked at me.

"Bill," he whispered. "Insane or not, Welty has actually discovered a method of counteracting gravity. No gas would lift a model that weighs as much as this one weighs. These little propellers won't do it. We saw it fly. We can't deny that it works. Bill, do you know what this means, if all the technical details can be worked out? Do you know what it means?"

"Hell, yes, I know. It means there won't be any more of our battleships on any ocean. We'll put wings on them and fly them to Tokyo through the air. We'll tell the Japs we're coming to pay them back for Pearl Harbor, only we'll tell them in advance, and defy them to stop us. We'll tell the Nazis to start looking for holes they can crawl into and pull in after them, because we're going to pay them a visit, with battleships in the sky. We'll tell Mussolini to take a nose dive head first off bis balcony, because if he's still around when we get there, he'll learn what trouble really means. We'll—"

I was probably balf crazy. And so was Jim Vaughn. There was a war going on, a dirty treacherous war, and we were going to win it, sure, in time, but with Welty's invention fighting on our side, we were going to win it *quickly*. With an effective method of counteracting gravity, airplanes wouldn't have to depend on wings. Without gravity holding them down, they could go straight up, high, high, as high as the sky. They could be made the size of zeppelins, but instead of having an outer surface of rubberized fabric that a bullet tore to pieces they could be armored with inches of steel, armed with heavy guns, made impregnable and irresistible.

Welty's invention would win the war!

And after the war was over, well, it would change the face of the earth. We would fly to work and fly home. We would fly down to Florida for a vacation in tbe winter and up to tbe north woods for a vacation in the summer. We migbt even build floating cities in the sky. Tennyson's "—pilots of the purple twilight dropping down with

costly bales," would come true in a way the poet never dreamed. And, with no gravity to fight, why couldn't we build moonships? There wasn't any reason. We *would* be able to build moonships. And after that, ships to reach the stars that glitter in the sky!

The invention of a lunatic might easily reshape human destiny!

THE phone buzzed. It was my secretary. "I have the hospital for you, Mr. Edgar."

A dry voice came over the wire. "This is Dr. Gerson of the Norton Psycopathic Hospital. What can I do for you?"

I told him who I was. "When your men return with Welty I want you to give him the best possible care. And I want you to let no one talk to him until I get there. This is of the utmost importance."

"Welty?" the doctor said. "Welty? I don't seem to recall the name. Is he one of our patients?"

"He was, until he escaped several months ago. Richard J. Welty. An inventor. Two of your men just caught him here in my office. They're on their way back to your hospital with him right now."

"Welty?" the puzzled doctor said. Then his voice changed. "Oh, yes, I recall the case now. He was here for a short time as a private patient. Our observations indicated he was suffering from a rare psychosis the outward manifestation of which was a dual personality. Nothing dangerous, however. We discharged him several months ago."

"You discharged him? I thought he escaped."

"Not at all."

"But listen," I protested, "if he didn't escape, why did your men come in here and grab him? Weren't they looking for him?"

"Certainly not," the irritated doctor said. "As for two of our men apprehending him, you must be mistaken. In the event of an escape, which is unlikely, we rely on the police to return the patient to us. We have no facilities for apprehending escaped patients."

This made something a little bit less than sense to me. "Listen," I shouted, "What kind of a run-around are you trying to give me? Two men from your hosiptal were in my office not fifteen minutes ago. They were wearing hospital uniforms, they grabbed Welty, put him in a strait-jacket, and said they were from your institution. What it this anyhow?"

"I'm sure I don't know what it is," the doctor said. "I would suggest the possibility that you are the victim of a practical joke. Certainly no men from this hospital did what you say these two men did."

"But I saw them do it!" I yelled. "They told me they were from Norton Psycopathic Hospital."

"Then they were lying to you!" the doctor snapped. "They weren't from this hospital, and from your description of their method of procedure, I doubt if they were from any hospital. Now you have wasted enough of my time."

Click! The receiver went back on the hook. The line went dead.

"What is it?" Vaughn demanded. "What did the doctor say?"

I told him what the doctor had said. His eyes widened. "Spies!" he gasped. "Those two men must have been spies. They must have known what he was working on. He got away from them long enough to get here but somehow they must have managed to follow him. They kidnapped him right from under our noses!"

Welty had been afraid of spies. Be-

fore the men had entered, he had said they were spies. We had thought he was cracked. But we were the ones who were cracked!

"Holy cats!" I yelled. "Get down to the front door and talk to the guards and find out which way they went. I'll put in a police call to pick them up. They didn't leave here more than fifteen minutes ago. They can't have gotten far—"

BUT Vaughn was already out of the room. I waited only long enough to put in a call to the police department and to call special guards to my office before I followed the engineer.

"Guard this model," I said to the husky men who answered my ring. "At all costs."

They nodded. The model would be guarded. As long as we had it, we could observe it in operation, disassemble it, study it, learn what made it tick. But we wanted the inventor too.

When I got to the front entrance I found Vaughn frantically questioning two guards.

"Yeah, I remember those two fellows from the hospital," one of the guards said. "They said they were looking for an escaped lunatic. Yeah, they got him all right. Put him in an ambulance right in front."

"Which way did they go?" Vaughn asked.

The guard nodded to indicate the direction in which the two spies had fled.

Before he could speak again, a squad car rolled up. The uniformed officer at the wheel leaned out. "You the guys that put in the rush call?" he asked.

He listened carefully to what we had to say. "Jump in," was all the comment he made.

The radio in the squad car let go with a blast. "Calling all cars. Suspicious ambulance moving at high speed along Maryland Avenue. Arrest and detain occupants—"

"Here we go," the driver said. He shoved down on the accelerator and the car almost jumped out from under us. We made the turn from the driveway into the street on two wheels. The officer sitting beside the driver turned on the siren. Here we went!

Judging by the startled looks we got, a lot of Washington residents must have thought an air raid was on. If we failed in our mission, if the Axis agents succeeded in spiriting Welty away and forced him to reveal the secret of his discoveries, there would be air raids on Washington. And on New York, and Chicago, and Los Angeles. Air raids such as the world had never seen before!

"There they go!" the driver suddenly said.

Far ahead of us, I caught a glimpse of an ambulance. A cop on a motorcycle was trailing it and as we watched, a squad car roared out of a side street and joined the chase. The driver of our car mashed the accelerator all the way to the floorboard. A puff of smoke leaped from the back door of the ambulance, stabbed toward the motorcycle.

The motor bike veered abruptly, skidded as the rider frantically tried to right it. Then it went out of control and dived headfirst across the sidewalk and through a show window. The rider went with it.

The driver's face went grim. The other officer reached down and picked up a tommy-gun. Neither said anything.

"We want their captive alive," I said.

THE ambulance swung out in a wide turn and roared out of sight down a side street.

The squad car that had taken up the chase ahead of us burned rubber as it made the same corner. Then we took it. Our car leaned like a yacht in the wind. Rubber screamed. But we made the turn.

Ahead of us the ambulance had already stopped. Two white-clad figures were leaping around. They jerked open the back door of the ambulance, yanked out a man in a strait-jacket. Half dragging him, they ran toward a large building that looked like it had once been a garage.

"They've probably got a bideaway in there," one of the cops gritted. "They may be able to give us the slip. Well, we'll see!" He was the one with the tommy-gun. He kicked open the door of the car and leaped out. Tbe driver grabbed a couple of tear-gas grenades, and followed.

The first squad car had already stopped. Two officers with drawn pistols leaped from it.

Dragging Welty, the fake hosiptal attendants vanished into tbe building. A heavy door slammed behind them. A small peep-hole popped open in tbe door, a gun was thrust through it, and a barrage of shots smashed at the police.

Tbe cops ducked for cover. But they didn't retreat. Keeping out of sight as best they could, they rushed the door. A machine gun blasted at the peep-hole and the pistol poking through it was abruptly withdrawn. A cop ran forward, shoved a tear-gas bomb through the hole. No more shots came from within. The tommy-gun was turned on the lock. Under the blasting stream of slugs, the lock gave way.

Tbe police kicked the door open.

There was tear-gas inside. The cops didn't bave masks, but tbey went in anyhow, shooting at anything that moved.

"Come on," said Vaughn.

The gas fumes were blinding in there, but we went in. I got there just in time to see the barrel of a gun come down with resounding force over the head of a fake hospital attendant. He hit the floor and didn't move after he hit. Tbe other man in white was already on the floor. A bullet had caught him exactly between the eyes.

"This the man you're looking for?" an officer cougbed, pointing to a figure in a strait-jacket.

Welty was moving. He was trying to sit up!

"He's alive!" Vaughn shouted thankfully.

WE CARRIED him outside, jerked off the strait-jacket. A quick examination disclosed no sign of injury. Tears were running down his face and he was coughing from the effects of the gas but be wasn't seriously hurt.

"We've got bim!" Vaughn exulted. "We've got the man who knows how to whip gravity!"

"Please don't hurt me," Welty begged. "I won't do it again. Please don't hit me. I won't do it again—"

"We're not going to hurt you, Mr. Welty," I assured him. "You can be certain of that. We're friends."

He wiped the tears out of his eyes and looked up at me. "That's nice," he said hesitatingly. "I'm glad you're not going to burt me."

Bewilderment appeared on his face as he looked at me. "Who are you?" he said. "I don't know you. Who are you?"

"You know me," I said blankly. "I'm Willlam Edgar. I'm one of the men who looked at your invention today. I'm from the war department. You brought your invention in for me to see. You remember that, don't you?"

I thought possibly he had suffered a slight concussion.

He stared hungrily at my face. "I never saw you in all my life," he whimpered. "I don't know anything about any invention. I haven't been within miles of the war department—"

"You—" I caught myself, looked closely at him. This was Welty all right. The beard, the sideburns, the clothes, identified him beyond the chance of a mistake. But he had changed. When he had first entered my office, he had been a blustering, domineering, to hell with you individual, the type that crashes parties, that orders waiters around, that won't take no for an answer. Now, he was frightened, timid, scared. A complete change had come over him. He trembled when he looked at me. He seemed to have no will of his own.

"He's stalling," Vaughn said vehemently. "He remembers all right. He just doesn't want to talk. He knows that we have discovered the value of his invention and he is trying to hold us up for a fancy price." Vaughn turned to the inventor. "You won't get away with it, do you understand? We'll pay you whatever you demand, but you've got to come clean with us. You've got to give us the theory back of your invention, the technical details—"

The inventor cringed away from him. "Please," he begged. "I don't know what you're talking about. If I've done anything wrong, I'm sorry."

He began to cry!

Vaughn looked worried.

Was Welty stalling? Was he putting on an act? Was he trying to gouge us?

There was only one way to find out.

I SENT Vaughn back to my office. Borrowing a squad car and two husky policemen as escorts, I took the inventor to Norton Psychopathic Hospital. Dr. Gerson listened carefully to what I had to say. Then he examined the inventor with great care. When he had finished he drew me aside.

"Welty is not attempting to deceive you," he said.

"But Dr. Gerson," I protested. "He surely must remember being in my office."

The physician shook his head. "I'm afraid not," he said. "I think he has no memory of ever having seen you or been in your office. We have here a case of a type of dual personality, a sort of Dr. Jekyll and Mr. Hyde situation. Welty has two personalities, each occupying different sections of his mind. In one personality, he is blustering, domineering, boastful—and, if what you say is correct, one of the greatest inventors who ever lived. In his other personality, he is timid, meek, scared of a shadow, and without enough mechanical aptitude to change a tire! When he came into your office, and unquestionably for some time prior to that, the inventive part of his mind was uppermost. But the shock of the kidnapping, the chase, brought his other personality to the surface. He can have one personality, or the other. Not both at the same time. The things he does as Dr. Jekyll he will not remember as Mr. Hyde, and vice versa. So he does not remember his visit to your office, nor does he remember anything about his invention."

This doctor seemed to know what he was talking about. I couldn't argue with him about his own field.

"But will he change back?" I asked. "Can you change him back? Can you fix him up so he will remember his invention? This is desperately important—"

"I'm sorry," the doctor shrugged. "What you ask is beyond medical sci-

ence. He may change back. He may not. But I can't force him to change back, and neither can anyone else."

That was that. Welty's secrets were locked up in Welty's mind where nobody could get to them!

"Well, anyhow, we have the model of his invention," I said. "We'll be able to work from that."

It was comforting to know we had the model. Vaughn was a first-class engineer. He would be able to determine the method by which the model worked. He would have help, all the help he wanted, the best engineering minds in the United States to work with him.

When I returned to my office, I found it jammed full of men. Engineers and army officers. The sight sent a surge of fright through me.

"What's wrong?" I demanded. "Is the model gone?"

Vaughn looked around at me. His face was tense and haggard. "It's here all right," he said, pointing to where it rested on my desk. "But—"

"But what?"

"But it won't work any more," he faltered. "When it fell, something must have broken inside it. I've turned current into it a dozen times. It hums, but it won't rise. It's broken—and we can't fix it . . ."

AND there the matter rests today. The model was broken when it fell. Every effort had been made to correct the difficulty, without success. Sure, the engineers—the best in the country—have disassembled it, taking pictures of every step in the process so they will know how to put it together again. They've torn it down and put it back together again a dozen times. They've studied it from every angle and have spent haggard weeks trying to develop the theory behind it. Now and then they swear at Vaughn and me because we insist we saw it fly. They say it can't fly. But we saw it fly and we stick to our guns.

There is no question but that in time they will discover what makes it tick. There are several strange and unusual crystals buried in the tiny instruments inside the bull. They resemble the crystals used to maintain frequency in radio transmitters and the engineers think tbe crystals are the key to the whole invention. But they haven't been able to analyze the crystals. They get hints, clues, elusive indications, but nothing that can be tied down definitely. They have discovered just a little of the underlying theory, enough to know that it operates on a principle entirely new to science. They'll lick the problem, in time.

Meanwhile, in a carefully secluded institution, Welty is being guarded day and night. He is having the best possible care. Everything that can be done for him is being done. But in spite of all the doctors can do, he remains a bewildered, frightened, cringing mouse of a man. The doctors say that if ever he starts to bluster and to raise hell in general, it will be a good sign. But he hasn't started blustering, yet.

And Jim Vaughn. Poor devil! He is the man who opened the switch that let the model crash. No one blames him for what he did. Anybody else would probably have done the same thing. But he blames himself. He has had a cot moved into his laboratory and he uses it to snatch a couple of hours sleep every night. The rest of the time he works on tbat model.

Some day be will discover how it works. Or some day Welty will come blustering into the lab and tell him how it works. When that happens, lookout Tokyo.

YOUR ORCHIDS—MADAM!

By CARTER C. WAINWRIGHT

IF YOU can't afford to buy orchids, why not grow them. No, they are not expensive to grow, but a world of patience and untiring effort is required to tend them.

The story of their growth is amazing. The tiny, undernourished orchid seed may take as long as six years to develop into a plant. Very rare orchids have been known to bloom only after a period of eighteen years.

The capsule of an orchid has been estimated to contain approximately 74,000,000 seeds. These seeds are exceptionally tiny and their rate of mortality is extremely high. The orchid seed is the smallest seed in the world and the least robust. Most flower seeds are rich in nourishing albumen, but the orchid seed does not contain a sufficient amount of this precious substance.

In its natural habitat, in the jungles and swamps, the orchid is dependent upon fungi to aid the seed to germinate. The greenhouse orchid plant is fed by certain vegetable jellies. The seedlings are planted in glass flasks and nourished on certain sugars and salts. They are kept at a temperature of about 70 degrees. Roots develop very slowly and the orchid kept in the flask for about a year. It is then strong enough to be transplanted to a flower pot. When the orchid plant eventually blooms, its flower lasts about a week to two months, according to species.

There are about 15,000 species of known orchids. They have a range of color similar to the Iris—light purple, yellow, white and mottled. Artificial hybrid orchids can be produced by careful crossing.

The care of this "neurotic" plant requires an extensive study of their fascinating background and biology. Orchid growing is trying and sometimes disheartening, but with lots of patience and love for this treasured of all flowers, you too can grow orchids in your own little hothouse.

Landscapes of Other Worlds

(Concluded from page 179)

the cloud layer being about five miles, possibly more. Electric storms will be frequent, they are probably the source of the Venus light on the dark side we see occasionally.

The reason for the steady interest in the climatic conditions on other planets is, of course, the question: "Can we expect life?" Nobody can answer that question if it refers to intelligent life. But as for life in general the answer for Mars and for Mercury's twilight belt reads: "Life will probably be found." For Venus the answer is still better, without undue optimism it can be phrased: "*Abundant* life will be found."

"He says he wants to sign us up for his circus."

GODS of the JUNGLE

by NELSON S. BOND

Deep in the ruined temple was a strange room; and when Ramey came out of it, many centuries of time had been wiped out . . .

IN the darkness before the dawn, the sky was a vault of purple-black, hoarfrosted with the spangles of innumerable stars. The moon, in its dying quarter, was a silver scimitar dangling low on the horizon; the earth below, from this lofty eyrie, was a shadowy disc more sensed than seen.

Ramey Winters, glancing briefly from the illuminated instrument panel into the tree-spired obscurity over which he flew, felt once more, as ofttimes before during these last few weeks, the tugging hand of beauty at his heart, and a curious wonderment that Night's jet mask could so completely disguise the grim world slumbering below.

Burma by day was beautiful—but its beauty was that of the wakened Amazon, bronze-girdled and strident, riding to battle with breasts straitlaced, with soft hands gripping the sword. Steel monsters, heavy-laden, groaned endlessly up the ancient Road which sprawls from Mandalay to Bhamo and Momein, thence, over tortuous ways ripped from sheer precipice by the naked hands of a million unpaid patriots, to Tai-fu and Chunking, carrying arms and supplies to a beleaguered

TWO-PART SERIAL
PART ONE

A dizzy whirl of events spun around them; a vast cyclorama of all the scenes of history

Dragon. Of late there were other rumblings, too. The tramp of shuttling troops, the ominous rasp of mechanized units, the hornet-tone of aircraft winging bases.

So Burma by day; a Burma not yet actively in the War but perilously close. But Burma by night—ah, that, thought Ramey Winters, was another story Burma by night . . . seen from the sky. A new land: a sweet, wild land of mystery and charm . . . of silver and shadow . . . cool, chaste, serene! As untouched and untouchable as the brooding gods of its people. Burma—

a land of stirring song and stranger story. Even up here, in these thin heights where the air should be fresh and cool, it seemed to Ramey that his nostrils scented wisps of sandalwood and musk. And beneath the persistent drone of his own motors seemed to tremble the faint, exotic pleading of native pipes.

It was a night of magic. Barrett felt it, too. Red Barrett, hard-boiled and devil-may-care as they come, Ramey's chum and co-pilot—even he felt it. He flashed his teeth at Ramey in an approving grin.

"Pretty, eh, keed?"

"Swell!" said Ramey. "Terrific! Kipling was right. Burma *is* the most beautiful country in the world." *

"Burma?" chuckled Red. "Don't look now, pal, but we ain't in Burma any more. This kite we're flying eats mileage—or didn't you know? See that hunk of silver ribbon below? Well, that ain't a ribbon; it's the Mekong River. We're over either Thailand or Indo-China, or both."

Ramey glanced down swiftly. Barrett was right. The sullen blackness below had suddenly been laced with a shining spiral of silver; the mighty Mekong, boundary-line separating Siam (now Thailand) and French Indo-China for more than 1,000 miles, coiled through the jungle like a gigantic serpent, its scales drenched with moonlight.

Winters' dreaminess vanished instantly. One look at the instrument panel and he shot into action. A tug and kick swung the old Curtis into a lifting, southward arc, following the twisting river. His words to Red Barrett were unhurried, but there was a tenseness in his voice.

"Okay. This is it, then. Keep 'em peeled, Red!"

"If I peel 'em any finer," Barrett grunted, "I won't have any eyelids. Think we'll see anything?"

"I know damn well we will. Those Japs aren't moving south for a clambake. They poured forty divisions into Indo-China—thanks to Vichy! Thailand is next on the hit parade; then Burma, back door to India. They want to close the Burma Road. So long as it's open, old Chiang Kai-shek will keep on giving them fits. Our job is to find out where they are concentrating their troops, so we'll be ready for them when they prance into Thailand."

RED looked hungrily at the trigger-press before him.

"If there's troops," he said hopefully, "there'll be enemy 'planes, huh, Ramey? Supposing one of them comes up to meet us? Can I—?"

"No! Definitely not!"

"But just by accident, like? I mean, if he attacked us first—"

"No, Red. Don't you see, all they're waiting for is an excuse to invade Thailand? Let us shoot down a single Jap 'plane tonight, and tomorrow their bombers will be over Bangkok. So—no shooting! Even if they fire on us."

"We-e-ell—" grumbled Barrett—"okay! But I think it's a hell of a way to fight a war. They bombed the *Tetuila* and sank the *Panay,* and all we got was: 'So sorry! Accidents will happen!' We're not even supposed to defend ourselves."

Ramey grinned at him; a lean, knowing grin.

"Don't you worry about that, pal. Your Uncle Samuel knows what he's doing. You and I were in the U. S.

* The Burma Road is the vital supply route over which the Chinese Republic, cut off from almost all sea commerce by the Japanese invaders, still maintains contact with the outside world. Were it closed, it is doubtful whether the valiant army of General Chiang Kai-shek could long continue its fight against aggression.—Ed.

Army airforce till the bewhiskered old gentleman in the striped pants graciously permitted us to 'resign' and fly for China. But I notice our paychecks still bear Yankee signatures. And don't forget—there are a thousand more like us. Neutral soldiers of fortune, learning the ropes 'just in case.'

"But we've got to keep our noses clean tonight. Get all the pictures and information we can, but don't get in any scrapes—them's our orders. Well, where are we now?"

As they talked, Red had been deciding, as well as he could, their route on the scroll-map before him. Now he drew a dubious circle.

"Here, maybe. Or here. About Kiang-khan."

"Good enough. And nothing stirring yet, hey? Well, we'll keep looking for a few more minutes, then head back before dawn—*Hey!* Get a load of that! Campfires! A bivouac! Mark it, Red!"

The command was unnecessary. Barrett had also seen the encampment, scored it on his chart. But now, as the pair craned intently into the flame-dotted dark below, striving to guess the strength of the enemy outpost, there leaped to life that which startled both of them to awareness of a new peril. Searchbeams burst suddenly from the ground, snaring them in a dazzling web; floodlights blazed a golden square in the black jungle; there came the first, frantic coughs of anti-aircraft fire—*phum-phum!*—from invisible guns, and the biting snarl of hastily-revving motors. And:

"Get going!" roared Barrett. "We hit the jack-pot! It's an enemy airfield!"

RAMEY needed no prodding. The first slashing finger of light had quickened into action the trained reflexes of an airman; already the small pursuit 'plane was lifting, bobbing and weaving away from the telltale beams. Now he gave it the gun; the snub-nosed Curtis flattened and streaked away like a startled swallow.

None too soon. Whatever shortcomings the Japs might have as warriors, they were speedy little devils. The Yankee fliers gained but a few minutes, a few short miles, advantage before their pursuers were in the air.

Even so, it should not have been difficult to escape in the dark. If it had only *stayed* dark as it should at this time of year, as it would have in any other place imaginable. But—this was the Orient, the semi-tropical topsy-turvy Land that skirts the China Seas.

Over the eastward horizon toward which they fled, an edge of ochre crept. Thin haze and hesitant; then deepening, widening, spreading, into a pearly, crepuscular veil. A cold and cheerless light against the backdrop of which their ship, both men knew, loomed as a perfect target!

Ramey gasped his dismay.

"Dawn! But—but that's impossible! It's only four o'clock. The sun shouldn't rise until—"

"*False* dawn!" corrected Barrett with sudden, comprehending savagery. "The famous 'dawn-before-sunrise'—that's what it is! I've read about it. It's possible anywhere, but it happens mostly in this part of the Orient. Result of flat country . . . heat . . . wide expanse of Pacific . . . refraction. You're heading the wrong way, pal."

Ramey nodded tightly.

"I know. I headed southeast to confuse them; didn't want to tip off our base. I thought we could swing back when they gave up. But now—"

"Now what?"

"We can't turn back or they'd nab us, sure," gritted Ramey. "Our only

chance is to outrun them. Maybe we can get to Singapore or—"

"On what?" queried Barrett. "Marsh-gas from passing swamps? This crate's only fueled for a thousand miles, keed. We've used half of that. And Singapore's a good nine hundred south."

"We might make Bangkok—"

"Or Australia," suggested Barrett drily, "or Hawaii? All right, chum—pull the cork. You ain't kidding me. This is the payoff, huh?"

Ramey, glancing up from the panel, met his comrade's calm, untroubled eyes levelly for a moment. In that instant, it occurred to him that Red Barrett was a hell of a fine guy. He wanted to say so, but men can't say such things. Sometimes they don't have to. He just nodded.

"I guess so, redhead."

"I won four bucks from Jimmy Larkin yesterday," said Red irrelevantly, "playing rummy. I should have collected it then." Again his eyes sought the machine-gun hopefully. "As long as we're in for it, we might just as well use up our old ammunition, huh, Ramey? We—" he hinted virtuously—"don't want to let no *matériel* fall into enemy hands—"

Ramey shook his head decisively.

"We won't fire on them. Not even if they fire on us first. Not even if they shoot us down. We can't risk causing the 'incident' they want. Our only chance is to outrun them, Red."

"Then we're in a hell of a pickle," Barrett told him gloomily. "Because they're faster than us. They're catching us now. Hold your hat, keed! Here it comes!"

AND with his warning, it came! The first chattering snarl of machine-gun fire from the foremost of their pursuers. Lead ripped and slashed at the fleeing Curtis; above the roar of the motor shrilled the *spang!* of metal on metal; Ramey saw a crazy, zigzag line appear miraculously in the cowling above him, heard the thin, high, disappointed whine of ricochetting bullets. Again he tugged, kicked. His 'plane leaped, darted to the right. Red grunted.

"Whew! That was close! One more like that—"

As if his words were an omen, another burst screamed about their ears. And the lethal cacophony was doubled, now; the second of their three attackers had found the range. The little ship seemed to jerk like a live thing as fiery pellets pierced its skin. It was only a matter of minutes before one of those bullets would find a vital spot, Ramey knew. No use continuing this unequal battle. Knuckles white on the stick, he yelled to his companion:

"Okay, Red—bail out! They can't land here. Maybe we can get away on the ground. Red! *Red!*"

Then, as there came neither answering word nor movement, he shot a quick glance at his buddy. One look told the story. Red did not move because he could not. Limp as a bag of sodden meal, he lay slumped in his seat, eyes closed, arms dangling uselessly at his sides. And in horrible contrast to the pallor of his cheeks, his face was mottled with a spreading nastiness that matched the color of his hair!

IT was at that moment a sort of madness seized Ramey Winters.

He was a soldier, aware of, and daily accepting, the hazards of his calling. He had seen death often; had several times heard whispering within inches of his own ears the sigh of the ancient scythe. It did not sicken him to see men die, nor was he afraid to die himself . . .

But this—this was different! This time the reaper had struck down Red Barrett, his chum, his more-than-hrother Struck him down traitorously and from hehind without a chance to defend himself. Red, who had asked nothing more than to go down fighting —and had not been granted that hreak!

It did not even occur to Ramey that as he sat there, stunned, stricken, ahout him still hammered the hlazing darts of enemy fire. There was welling within him a great flame, a torrential, all-consuming fire of rage that hurned through his veins like vitriol. And suddenly it no longer seemed to matter that he was under orders to avoid all fights; the prohlem of an "international incident" was a hollow legality in which he had no concern.

If he thought at all, his thoughts were mere rationalization. Three Japanese flyers—and hlmself! Lost in the clouds above a wild, green jungle. Unspied upon, unseen. If none of the three were ever to return to his hase, who was to report this episode? Who accuse the Thais of violating their neutrality? And did it make much difference, anyway? Everyone knew the Sons of Heaven—on some excuse or other—would march into Siam when they were ready. So—

Ramey decided. His hand found the trigger-press for which Red's fingers had yearned. A kick on the rudder . . . knee to the gun . . . and the tiny Curtis came up and over like a wild hird soaring. And it was no longer a startled swallow, hut a killer-shrike, vengeance-hent and striking with the pent fury of boundless wrath. The butcher-hird darting on its prey.

And finding it! Before the foremost of his pursuers could analyze and parry this unexpected maneuver, Winters was upon him. In the circular machine-gun sight the Jap airplane loomed nearer, larger, more solid. Then—the gun hucked and kicked against his palms. The vision hefore him quivered and seemed to crumple, sheered off and away, spun giddily . . .

"One!" said Ramey Winters, and did not know he spoke aloud. "That's one!"

He kicked over, sensing a danger hehind him, and In that one motion became attacker rather than attacked. It was a closer thing this time. His foeman's gun hore squarely upon him for a hrief, unguarded moment. Ramey felt something like the jerk of a hand on his sleeve, and glancing down, saw with mild astonishment that his leather flying coat was split from wristhand to elhow, spilling powdery fleece.

Then his 'plane righted itself, his own gun answered and—it was a most amazing thing! Before his eyes the enemy ship hlossomed into a crimson hloom with hurgeoning petals of hlack! A flower which suddenly hurst asunder and spiraled to earth in a host of flaming motes.

And that, he thought grimly, was *two!* The third—?

SWIFTLY he scanned the ever-lightening skies, hut he could not locate the missing 'plane. For a hreathless moment he feared that in the melee it had escaped; then the voice of his old Comhat Instructor at Kelly Field seemed to whisper an old, almost forgotten warning:

"If you can't see it, look out! *It's on your tail!"*

Once more, and this time with frantic haste, he shot the ship into a climh, a wingover turn. But not hefore a hot hail, punching on metal behind him like the vihrant tattoo of pounding rivets, rasped a song of death in his ears. Then he was on a level with his enemy—and driving headlong at him!

For a yearlong moment it seemed in-

evitable they must crash head on, collide and destroy each other and go hurtling to earth locked in flaming, loveless embrace! But not for an instant did Ramey's finger relax its pressure on the trigger. And when scant yards separated their whirling propellers, bis bullets found their mark. The enemy pilot suddenly collapsed in his seat; his body, pitcbing forward, was a dead weight on the stick. And with a shuddering groan, the last Jap fighter nosed earthward in a streaking dive!

It was a moment of triumph. But Ramey Winters never found time to savor that victory. For even as he pulled back on the stick to lift himself clear of the falling 'plane, the stick went dead in his hands! From somewhere deep within the entrails of the gallant little Curtis came the grinding clash of metals. At the last moment, a dying foeman had evened the score. Ramey's motors spluttered and died, and the thin song of wind lashing the fuselage was the only audible sound in an awful silence as the ship, like a dancing leaf, glided earthward out of control.

There was but one thing to do. Ramey plucked at the buckle of his safety belt, prepared to go overside. And Red? Well—it was an airman's burial. A moment of flame, tben an unmarked grave in the jungle. Ramey glanced once more at his chum. "So long, Red," he whispered. "See you again, pal—"

Then he gasped. For Red's lips had fallen open, and a bubble of bloody spittle was leaking from one corner of bis mouth—but this tiny spume pulsated faintly! Breatbing! He was still alive!

AND—it was no longer possible for Ramey to take to bis 'chute. Somehow, *somehow!* he must get this crippled ship to earth. He stared down wildly. Trees . . . trees . . . an endless tangle of foliage towering high, bayonet-tipped. But—Ramey trembled with sudden, feverish eagerness—over there a patch of lighter green! And something that looked like gray walls, a manmade building! A cleared field. If he could—

Once more and desperately he wrestled with the unresponsive stick. No good! The rudders, then? If the aileron wires were undamaged he might be able to control, to some extent, the direction of their glide. Ease the brutal shock of landing.

But now the ground was a vast, blunt bulwark rushing up to meet them. Like an organist treading the pedals of his instrument, Ramey played the only controls he had. Composing out of urgency and stress a symphony which, when the ultimate note was scored, must be either a paean or a dirge!

And the ship responded. Weakly, true! But its nose lifted a trifle, the ailerons caught and gripped the air, the drifting leaf spun lazily toward the clearing. Earth looming larger, and the indistinguishable whole of the jungle sharpened to single trees and tangled groves of bamboo and liana. Gray of swamp water and brown of soil; sudden pink of a frightened flamingo racing for leafy covert. Almost down, now . . . and the wind howling through the motionless propeller like a taunting fiend. His own voice, strange in his ears, calling senseless encouragement to his unhearing companion:

"All right, Red! Hold tight, boy! In a minute—"

Then one wheel touched the ground, bounced; the shlp reeled shuddering forward. Clear of the trees, but careening wildly, drunkenly, across a furrowed field. Rocking, swaying madly.

Then—the crash! The moment of slashing pain . . . the dancing light . . .

the numb despair. Then nothing . . .

CHAPTER II

The Mystery of Angkor

WHEN you are dead, the little demons gather and make merry. They will not let you rest. Huddled about your weary soul they chatter in bee-thin voices; they lift your head and force open your lips and pour molten fire down your throat, a liquid fire that chokes and strangles.

Ramey strangled on liquid fire, and opened his eyes. He—he was not dead, after all, but alive! The sweetness of native brandy was on his lips, the far voices waxed nearer as consciousness returned, and he was surrounded by the familiar figures of *not* scarlet imps but human beings!

Or—wait a minute! Maybe his first hunch was right after all. For *most* of those staring down at him looked like people, but surely the vision bent closest was that of an angel? A golden-haired angel with heaven-blue eyes, warm lips, a cool, white skin which the sun seemed never to have burned, but only to have endowed with a memory of its own inner glow.

"Lovely!" said Ramey drowsily, and the vision's face colored most unecclesiastically. Behind Ramey someone chuckled. Ramey, turning painfully, saw a tall, mahogany-skinned, nice-looking youngster with brown hair and eyes, dancing eyes crow's-footed with the wrinkles of perpetual mirth. This lad and the girl, he saw now, were the only whites in the circle. All the others were natives. The young man laughed again.

"Well, Sheila, there doesn't seem to be anything the matter with *this* one! Or with his emotional reflexes."

Recollection seeped slowly back upon Ramey. He made an effort to rise.

"The—the 'plane," he said confusedly. "Went dead. I tried to set 'er down in a field. Crashed—"

The girl restrained him gently but firmly. The cool touch of her hands was soothing.

"You must lie still, now. Everything is going to be all right. You did crash, yes. But fortunately we were here to drag you and your friend out before the 'plane caught fire. After you've rested for a moment, we'll take you to camp—"

It all came back to Ramey now. This time the girl's hands could not prevent him from raising himself.

"Red! Is—is he all right, too?"

The young man answered.

"Your buddy? I suppose so, or Syd would be chanting a funeral march by now. Hey, Syd! How's your patient?"

THE huddle encircling Ramey split, admitting a third white man. Ramey glanced at him casually, then started, took another good look, and turned to peer over his shoulder again at the one who had called. The two young men were as like as two peas in a pod. Same height, build, coloring. Only their facial expressions differed. The newcomer's face was as dour as the first chap's was jovial. He commented acidly, "I wish you wouldn't be so boisterous, Lake! I guess he has a chance to recover—if complications don't set in. Of course, these head injuries are dangerous. It may be a fractured skull, or he may lose his sight—"

"Blind!" gasped Ramey. "Red? Oh, Lord—"

For the third time, the girl quieted him. This time with a smile. "Don't get excited, soldier. Your companion's apparently in fine shape. That's just Syd's nice, optimistic way of viewing things. 'Fractured skull or loss of

sight' is a favorable prognosis—coming from *him!* If it were anything *really* serious, Syd would have the workmen digging a grave by now. Are you sure you feel well enough to get up?"

Ramey nodded, not daring to risk speech as he got to his feet. His head throbbed like a concrete mixer, and there were rubber pipes where his shinbones should be. But somehow he managed it, and once off the ground, began to feel better. He strode to Barrett's side. The blood had been sponged from the redhead's face, and his head was rudely, but efficiently, bandaged. He grinned at Ramey.

"Hyah, Sunday-driver! Next time holler before we go under a low bridge. I forgot to duck!"

Ramey said, "You're lucky that bullet bounced itself off your bean. If it had hit anything less solid you'd be on a slab now. How's the head feel?"

"Like a wisdom tooth stuffed with sugar," complained Red. "If it's not too mucb trouble, keed, how's for bringing me up to date on the news? Where are we? And bow did we get here?"

It was the smiling young man who supplied the answer to the first question. He said, "You're at Angkor, Cambodia, French Indo-China. I'm Lake O'Brien. The walking scowl over there is my brother, Syd, and to save time, yes, we're twins. The young lady is Miss Shelia Aiken; her father is the leader of our expedition. We're Americans. Southeastern University Archeological Expedition, if that means anything to you. But how about you? You're from the U. S. A., too, aren't you?"

Ramey nodded. "Flying for the Republic. Tbat is—we were until the Japs tagged us this morning. The reclining ex-airman with the bandaged dome is Bob Barrett, 'Red' to all but his colorblind friends. I'm Ramey Winters. We're greatly indebted to you for your help."

"Forget it!" grinned Lake. But the less genial twin shook his head gloomily.

"This is a nasty mess. Indo-China is under Japanese 'protection,' you know. If any of the Japs saw that dogfight from their camp down the river, there'll be troops up here in an hour or so to investigate."

"DOGFIGHT?" echoed Barrett. He stared at Ramey with sudden understanding. "So *that's* it! That's where they disappeared to? Why, you scrapping son-of-a-gun! Get all three of them?"

Ramey nodded guiltily.

"I—I sort of blew my conk. I thought you — I mean — Oh, hell! What's the difference? O'Brien's right. I got us all in a jam. The only thing for us to do, Red, is to get the hell out of here, but quick! Before we implicate a bunch of innocent bystanders. So, friends, if you'll point the way to the Thai border—"

But it was the girl, Sheila, who this time spoke up.

"Nothing of the sort! You're in no fit condition to head into the jungle, either of you! Besides, you'll have to have food, water, blankets. And Daddy will want to see you."

Lake O'Brien voiced agreement.

"Sheila's right, Winters. This is a pretty secluded spot. Chances are no one but us saw you crash. Even if they did, it'll take them quite a while to get up the river."

"We-e-e-ll—" hesitated Ramey. It was Red's obvious weakness that decided him. First aid was all right, but rest was what the scarlet-top needed. "If you think it's safe—" he said.

So they started across the field. Only Syd O'Brien, frowning uncertainly, ventured any unfavorable comment on

the move. The sour-visaged twin offered Barrett a supporting arm but grumbled even as he did so.

"I don't like it!" he muttered forebodingly. "We're doing a foolish thing. And no good will come of it . . ."

WHAT sort of camp Ramey Winters had expected to see, he did not clearly know. Something, perhaps, like the tented digs at Petra—Ramey had once visited the rose-red cliffs in Arabia—or the shacks at Ur-of-the-Chaldees. Archeology led men into strange, wild places. There would be ruins here, no doubt; Ramey dimly remembered having glimpsed gray buildings, or something of the sort, in the hectic moments preceding the crash.

But never in the world had he dreamed of seeing that which he actually beheld! Beyond the field sprawled a narrow grove of cane and palm; when they had eased their way through this, they stood on the edge of a wide, sluggish stream, once more looking out across flat terrain. And—

Ramey's eyes widened. Speech died at the incredible sight before him. Because the stream was not a stream, but a seven hundred foot moat, circling to left and right as far as the eye could see, spanned by a tremendous paved causeway of sandstone which arched into the central portico of a gigantic structure!

And what a structure! Roughly rectangular, at least one mile long on every side, comprised of one massive central building and numberless, smaller, flanking one. The central edifice consisted of three stages connected by numerous outer staircases, decreasing in dimension as they rose, culminating in a lofty, pyramidal tower.

Red Barrett was popeyed, too. But the redthatch was never speechless. He croaked, "Holy potatoes, Ramey—what's that? Do you see what I see?"

"If I don't," answered Ramey, "we're *both* that way!" And he turned to Lake O'Brien helplessly. "What—?"

Lake grinned.

"Temple of Angkor," he explained. "Angkor Vat. You mean to say you've never heard of it?"

"Never! Who lives here?"

"Nobody," chuckled Lake, "but us archeologists. You see— But never mind! Here comes Dr. Aiken. I'll let him do the explaining. It's his pigeon."

Having met Sheila, Ramey would have known without an explanation her relationship to the man now approaching. The scientist's hair was iron-gray where hers was golden, and his shoulders were hunched with long years of poring over pottery shards from obscure kitchen-maidens, but they shared the same fine, small-boned structure, the same wide brows, startlingly identical mist-blue eyes. He was accompanied by two natives, aides of superior rank, evidently, since they were dressed in European clothing.

DR. IAN AIKEN was an efficient man. In what sounded to Ramey like one, continuous sentence, he introduced himself and his two Asiatic assistants — "Sirabhar and Tomasaki; very fine boys, very!"—sent the gaping workmen about their jobs, and herded the group toward the temple. As they walked along he sated his own apparently boundless curiosity with a resume of the important facts; by the time they had reached the camp headquarters, a group of sheltered chambers within the temple proper, he had appraised the situation and formed a decision.

"Sheila was correct!" he snapped brusquely. "Arrant nonsense to even consider leaving here! Barret's wound will need attention. You're both tired. Need a good rest."

"But the Japs?" reminded Ramey. "Syd says they have a camp several bours down the river?"

"Blast the Japs!" retorted Aiken pettishly. "Greedy little yellow beasts, anyway. Never did like 'em! Don't you worry about the Japs. Needn't know you're here. You two get out of those uniforms, burn 'em. If they come sticking their dirty little snub-noses in here, you'll be two junior members of my party. Diplomatic immunity. Won't dare touch you!"

Barret nodded to Ramey.

"That's so, pal. The Japs ain't looking for no more trouble with Uncle Sam just now; not till Hitler turns on the green light, anyhow. Even if they do see our crashed 'plane, they'll think we burned up in it."

"Unless one of the laborers spills the beans," Ramey reminded. "But if Dr. Aiken tbinks its safe—?"

"Think? I know it! My men won't say a word. Not a word. Absolutely loyal, every one of them. Furthermore, the Cambodians bate the Japs as much as we do. More! Isn't that rigbt, Tomasaki? All right, now—get along with you! Clean clothes and a shower. Then we'll all have a bite to eat."

So, smiling, the two young airmen left their peppery host for the time being. Clothes were donated to them, khaki shirts and whipcord breeches from the wardrobes of their new-found friends. Barrett was clothed from the locker of Johnny Grinnell, only member of the expedition they had not yet met; Ramey found the duds of either of the tall O'Briens a perfect fit.

THUS it was that, feeling like new men, a short time later they sat down to breakfast. The meal, as American as a World Series, was a feast to two who bad taken their fare for months in a Chinese Republic mess-hall. Cereal, ham and eggs, griddle-cakes with maple syrup, coffee—bot, black, aromatic coffee instead of green tea!—tempted Ramey into over-eating till the waistband of Lake O'Brien's breeches strained like a sausage skin.

It was then, after the empty dishes had been removed and he dragged the luxurious fragrance of American-cigarette-smoke into his lungs, that Ramey brought up the subject which had perplexed him ever since he first saw this place.

"Dr. Aiken," be said, "if I weren't sitting right *in* this building, seeing it with my own eyes, I wouldn't believe it could exist. I never dreamed tbere was such a place! How long has it been here?"

The archeologist quirked an eyebrow at Lake O'Brien, who grinned back. The others—Sheila, Grinnell, even Syd—seemed to share his amusement. Dr. Aiken shook his head.

"I don't know, Winters," be said.

"But then—who built it?'

Again an arch grin. "I don't know tbat, either."

For a moment Ramey stared at him bewilderedly. Then a slow flush stained his cheeks. Ob, that was it? They were poking fun at him; mocking his ignorance? Well, all right—if they wanted to act that way—

"Excuse me!" he said stiffly. "I didn't understand. Sorry to be so stupid. Red, perhaps we'd better get ready to run along, after all. We seem to be in the way here.

But Ian Aiken stayed him with a hand on the arm. He was still grinning, but bis grin was warm and friendly. "Sit down, Ramey, and don't be an ass. We're not laughing at you. We're amused because the situation is *what* it is: so baffling that we must either smile it off or surrender.

"The answers I just gave you were absolutely true—and no man alive can tell you more. The mystery of Angkor is this: that here in the depths of an aboriginal jungle we find a temple dwarfing the greatest architectural work of present-day Man, and a city large enougb to hold thirty million souls —yet not a man in the world knows *who* built this marvel, or *when* it was built, or *where* the builders came from, or wbere, above all, vanished the migbty race whicb once lived here!"

CHAPTER III

The Vanished Race

FOR a moment Ramey Winters stared at the gray-haired scientist incredulously. Then he laughed. "All right, sir," he said. "I'll bite. What's the gag?"

But there was no twinkle of amusement in Dr. Aiken's eyes now. He leaned forward over the table, his manner sober and abruptly serious.

"It's no joke, Ramey. It's the cold truth." In his voice was a strange note, a sort of angry helplessness. "For years men have been pondering this problem, but still the answer eludes us.

"In the year 1860, tbe French naturalist, A. Mouhot, came up the Mekong River in search for flora and fauna, and by sheer chance stumbled upon the massive, walled city of Angkor Thom, about one mile from here. I used the word, 'stumbled'; actually, only the toe of a giant could trip over such an obstacle. For Angkor Thom is a rectangular enclose two miles in each direction, surrounded by a wall thirty feet high; within these walls are more than fifty towers, averaging two hundred feet in height! Altogether, the wall encloses something like a hundred and seventy-six acres of palaces, terraces, temples and galleries!

"That was the city proper. For miles about were the ruins of smaller abodes. This building in which we have made our headquarters, Angkor Vat, is supposed to bave been Angkor Thom's chief temple. You have already exclaimed at its size. Let me point out that you cannot completely grasp how huge it is because there exists here no basis for comparison but palm trees, fromager, cane. The façade of this single building is five times as wide as the Cathedral of Notre Dame!

"Naturally, Mouhot was greatly excited. The records of mankind did not even hint at there ever baving been such a civilization in this part of the world. He asked his native guides whence came these structures, who built them?

"Their answer was—the Gods!"

Ramey Winters nodded, fascinated. "I can understand that. Whatever men conceived and fasbioned this edifice *were* of godlike stature. Before the world went crazy, I studied a smattering of architecture. Enough to realize the tremendous effort expended here —"

"Ah, but you haven't begun to see the wonders! Look at the walls and ceilings of tbis room, my boy."

"I BEEN looking at tbem," spoke up Barrett. Darned things is simply lousy.—'scuse me, Miss Sheila!—I mean the walls and ceilings is covered from top to bottom with carving and stuff. Pictures and wiggly scrolls and everything. What was this? Part of tbe art gallery?"

Dr. Aiken smiled distantly.

"Yes, Red. A very, very small portion of the hugest art gallery ever known. Because every square inch of wall in both Angkor Thom and Angkor Vat is covered with similar stone sculp-

turing! There are murals two hundred . . . three bundred . . . feet long emblazoned witb the images of thousands of warriors in battle! A statue of a *naga,* or seven-headed serpent, more tban one bundred feet long. Figures of gods and men, of evil demons, of creature unlike anything known to Man. About the grounds are single stones a hundred feet high, handcarven to represent gods wbose names we do not know."

Ramey frowned.

"Now, wait a minute, Doctor. Tbat's impossible, you know! I mean, a hundred feet higb—"

"I quite agree witb you, Ramey. Such sculpturing is impossible to present-day civilization. My colleague, Alfred Maynard, once wrote: 'To transport these monoliths and erect the colossi, strength was wielded that our machinery does not supply.' A true statement of the case. The nearest quarries of the stone of which Angkor was built are twenty miles away! Modern engineering could no more duplicate the feat of building this structure than it could match the Pyramid of Cheops!

"Yet even if this gigantic task of transportation of materials could be accomplished—what craftsmen today could match the stone-engraving of these walls? The ancient workmen used no cement. With wbat incredible tools tbey pierced this stone into delicate images, we cannot guess. Tbe pillars are as painstakingly filigreed as if wrought by a goldsmith. In a chamber I sball sbow you—a subterranean niche discovered by Lake, here—is something even more remarkable. A cabinet of *metal,* inscribed witb hieroglypbs eroded just enougb to be indecipherable!"

Lake answered Ramey's questioning glance with a nod.

"That's right. Damnedest thing I ever saw. Sort of a cube, about twelve feet square. Hollow, too. But I can't find any way to open it. The inscription probably tells what it's all about, but as the Doc says, you can't quite read it. Almost, hut not quite. It's tantalizing. Like a picture out of focus, or—"

"Probably just as well." That was Syd O'Brien voicing his gloomy opinion. "Don't like the looks of the thing. Sinister."

"I'd like to see it," said Ramey. "I'd like to take a week or so and see everything about this place—Wbat's up, Red?"

The redhead, seated nearest the doorway of tbe room, bad come suddenly to bis feet with a warning gesture. Now he whispered hoarsely, "Doc—outside! A spy! Somebody's found out about me and Ramey being here!"

In a single motion, Ramey was on his feet, his automatic in bis band, was gliding to bis friend's side. Red was right. Ramey was just in time to see a furtive figure, scar-faced, yellow-robed, Oriental, slip behind one of the numberless pillars supporting the corridor. He spun.

"Red's right! They're on to us. I knew we couldn't get away with this. Everybody sit tight; Red and I are going to pull out before we get you all in trouble . . ."

THEN Johnny Grinnell was at his shoulder, and he was snorting amused relief.

"It's all right, Winters. Put your pistol up. It's only poor old Sbeng-ti. He's probably bungry again, daft old devil!" He called quietly in a tongue that Ramey—though he did not speak the language—recognized as Cantonese. Slowly the figure emerged from behind

the pillar. Ramey saw a lean, shaven-pated Oriental of indeterminate age clad in the filthy yellow robe of a Buddhist *bonze*, or priest.

The *bonze* moved forward hesitantly, his eyes darting suspicion at the two strangers. As he approached, his mumble became English words.

"Food! The child of Buddha hungers."

"Very well, Sheng-ti," said Grinnell soothingly, "We share witb thee." Aside, to Ramey, he explained, "Sheng-ti's a *ku'an-chu*, Most Holy One. Not quite right up here. Not an ounce of harm in him, though. We feed him, and he calls down Buddha's blessing on us. Fair enough, eh? Behold, Sheng-ti, we have guests! The bird-men from the sky have come to visit us."

The priest glowered at the two strangers malevolently.

"Later we shall show them the wonders of the temple," continued Grinnell. "They would see the statues of the gods, the fountains and the hidden crypt—"

At his last words, a spasm of something akin to terror passed over the face of the yellow man. His eyes clouded and he thrust long-taloned hands before his face as if fending off a blow. His voice lifted in a discordant croak.

"*Aie*, doom!" he cried. "Doom . . . doom . . . doom!"

And turning swiftly, he fled, ragged skirts trailing behind him, sandals slip-slopping on the stone floor. Ramey grunted.

"Well! Pleasant little harbinger of spring, isn't he? That last crack of yours went over big."

Dr. Aiken smiled.

"I shouldn't let that worry you, my boy. Sbeng-ti's a dire prophet, but a poor one. He warned me three years ago that if I did not leave this temple I would 'vanish into yesteryear', never to return. Cheerful thought, wasn't it? But I'm still bere.

"Now, sit down, both of you, and stop worrying about nonexistent troubles. Have you forgotten we are on an island surrounded by a moat? Our watchmen guard every approach. If anyone comes near, we'll be given ample warning. Now, let me see—what were we talking about?"

"Tbe chamber Lake discovered."

"OH, YES! Well, that's but one of the thousand mysteries of Angkor, Ramey. There are many more. I might point out some of the peculiarities of the sculpture itself. Oddly mingled with painstaking representations of ordinary men, are the figures of incredihle, fabulous monsters. Dragons, great *nagas*, hypogrifins, monkeys garbed in human clothing, acting like men, apparently talking to each other and to humans.

"You might reasonably say that these representations are figments of the creative imagination, a sort of 'artistic license,' so to speak. But here's the ruh! Wbenever *men* are depicted, they are reproduced with elaborate fidelity. Not a single effort is made to aggrandize or conventionalize, as is the case in the artistry of other ancient races. The Minoan, for instance, or the Egyptian. The builders of Angkor seemed to pride themselves on faithful portrayal.

"But *why*, then, did they detract from their accuracy by delineating the figures of nonexistent creatures? And the colors they used—why did they portray some human figures as white, others yellow, and still others *blue?* Unless—" Ian Aiken's voice throbbed with eagerness—"tbese were creatures and men they knew?"

The older man's excitement com-

municated itself as an uneasy chill to Ramey. He said, "You mean—?"

"I don't know what I mean, Winters—yet. I'm still studying, still trying to unite in coherent oneness the facts imperishably carven here for someone to discern.

"All I know is that Angkor Vat is *old*—considerably older than baffled science has hitherto been willing to admit. By the eyes and the feet of the statuary we judge its period. Blank, staring eyes, unfocussing; feet carven by artists so unaware of perspective that they exposed the soles of a walking person.

"I know, too, that the explanation is written here on these walls for him who can solve the Angkor script. We have not yet found the key. The letters seem to resemble the elder Siamese, which itself resembled Sanskrit. Perhaps we'll never unlock that lingual door.

"But there is one universal language, Ramey Winters! The language of science, mathematics, astronomy! And here we have a whole city written in that language. The arrangement of Angkor is as truly symbolic, as truly based on the mystic science of numbers, as is the famed King's Chamber of Cheops' pyramid.* And there are certain astronomical carvings—"

"BUT, look, Doc—" That was Red Barrett cudgelling his brow—"if this here place was discovered about 1860, the scientists ought to been able to figure it out by now. Ain't they no histories at all, no ideas how it come?"

Dr. Aiken's smile was scornful.

"Too many," he answered, "and too poor! For want of a better explanation, experts have decided that a race known as the 'Khmers' inhabited Angkor. They have even presumed to establish the period of occupancy: from about the 5th Century B.C. to the 14th Century of our Christian reckoning. Some of the more daring savants have attempted to trace the 'lineage' of Khmerian royalty.

"Gentlemen, believe me—these explanations are rank nonsense! Based on no valid records, facts, or suppositions! The learned M. Groslier, attempting to explain why Angkor Vat should lie deserted and forgotten for five hundred years in a jungle grave, presents the theory that the Khmers waged a war with the neighboring Thais, were defeated and forcibly driven from their national stronghold.

"Stupid poppycock! The weak Acadians of Nova Scotia were expelled from their homeland by armed force—yet within two generations seventy percent of them had drifted back—to tiny farms and wretched hamlets. But we are asked to believe that a great race meekly left its capital and never attempted to return!

"Yet—suppose that were true? A faint possibility, but let us grant it. Then why did not the conquerors move into occupy what must have been the most magnificent city on the face of the earth. Remember, at the height of its glory, Angkor Thom must have been prouder than Augustus' Rome . . . more alive with swaggering splendor than Hannibal's Carthage . . . gay and rich as the Golden Chersonese of fable!"

Ramey nodded.

"Sounds whacky," he agreed. "Any more theories?"

"One even more implausible. That a plague destroyed the entire population of Angkor."

* Many devotees of the "science" of numerology are firmly convinced that the Great Pyramid of Cheops was too geometrically designed as to present to him who could decipher its structural allegory a comprehensive prophecy of the world's future for more than 5,000 years.—Ed.

Ramey shook his head. "Well, that *could* have heen, sir. Before the advance of medicine, plagues used to ravage whole countries periodically. The Black Death is supposed to have killed more than twenty-five million persons in Europe in the Renaissance period. The bubonic killed ten thousand a day in Constantinople during the Interregnum. Even today the Orient is swept by raging plagues—"

"I REALIZE that, my hoy. But tell me—you've heard of the Great Plague of London? What did the city look like?"

"It was a charnel-house. Death-carts . . . dead bodies in the streets . . . graveyards filled to overflowing . . ."

"Exactly! Now, listen here! In all of Angkor Thom, there are no human remains to be found!

"You will say this merely indicates tbat the Khmers did not inter their dead. Perhaps they had no sepulchers, no graveyards or tombs. True. But shouldn't there be human remains somewhere in or near these structures? Even if age did rot the carcasses, there should be bones! But—there are no bones in Angkor!

"Not only that, but there are no weapons, no pottery fragments, no accoutrements! If I die, one of thirty million souls simultaneously stricken by death, my body can decay, my crumbling bones may be swept away by the winds, yes! But the Khmers wore metal bracelets, belts, buckles; used utensils of metal. Their pictures tell us so.

"Yet there is not one piece of wearing apparel to be found in all Angkor! Not a single pin, not a scrap of household furniture, not one old, discarded cooking-pot! Now, how do you account for that?"

Ramey, staring at the old archeologist, slowly shook his head. "I—I can't, sir. Can you?"

Ian Aiken's eyes were strangely introspective.

"I see but one possible solution, my boy. There was a mass emigration, purposeful, determined, complete. That —until a more satisfactory theory presents itself—is the way I am forced to explain it. And it is an explanation at least halfway in accord with the symbolic drawing I mentioned a few minutes ago. The drawing that shows—Yes, Sirabhar?"

He broke off suddenly as the small Cambodian bustled into the room, dark eyes wide and frightened.

"Pardon, master Doctor, sir! But warriors approach. Armed forces of the Island Ones cross the South bridge."

"This time it ain't no false alarm, Ramey. It's the Japs. They *did* see our 'plane crash, after all!"

CHAPTER IV

Attack

SYD O'BRIEN said glumly, "I knew it! Now we're in a mess. I guess I'll write my thesis in a Saigon prison!" But the expedition leader turned on him testily. "Nonsense, Sydney! There is absolutely no cause for alarm. Naturally, the Japanese had to investigate a falling 'plane. But they can't possibly know the aviators are safe, and masquerading as members of our party—" He turned to the others— "Shall we go out to meet them? It will look hetter. No, Sheila—I think you'd better stay here!"

The girl's shoulders stiffened defiantly. A strange admiration brightened Ramey's eyes. Or perhaps it was not so strange, after all. Many times, during the preceding hour of conversation,

he had found his gaze wandering toward her. In a happier, more peaceful world, perhaps—

"Why should I, Daddy?"

"Sydney—" Dr. Aiken ignored the question—"you'd better go down and speak to the workmen. Reassure them. Get Tomasaki to help you. Ramey, you and Lake and I will talk to our visitors. All right, Sirahhar, you may come, too."

"How ahout me, Doc?"

Dr. Aiken glanced meaningfully toward the bandage on Barrett's head. "I think you'd hetter stay here and keep out of sight,' he said wryly. "That—er—turban you're wearing is the weak spot in our story!"

A few minutes later they were moving forward to meet the Japanese scouting detail. Despite Dr. Aiken's assurance, Ramey's confidence was bolstered by the comforting heft of an automatic in his hip pocket. The Nipponese, over-cautious in this as all things, had sent a sizahle investigating party to Angkor. Thirty squat, brown, dusty men; truculent; ready for any emergency.

Their captain made his mission known in a faltering, school-book English. An airplane had been seen to descend of the sky, please. Did the gentlemens opportune to see—?

Good gracious—an airplane? How alarming! No, the gentlemens had not seen anything out of the ordinary. Would the honorahle captain care to look around for himself?

It struck Ramey that Dr. Aiken was sticking his neck out unnecessarily far. The captain barked commands, his company split into details of two and three men, wandered off in different directions. Then Ramey realized Aiken had followed the proper course. With such a wide area to cover . . . with the hurned ship lying a half mile off, in a field concealed by an arras of tangled bamboo . . . with the Japanese not even sure the 'plane *had* landed in this vicinity . . . the chances of their stumbling across it were extremely remote. And to have seemed any less willing to help would have heen to invite suspicion.

HAVING done his duty, the little leader was inclined to be friendly. He stared ahout him with awed respect. This was a great marvel, not so? He had not known there were such sights in Cambodia. One would not suppose it from seeing the miserable hovels at Pnompenh, down the river. It was not, of course, to be comparison with the beautiful, modern huildings of Tokio and Kobe, still—

He sucked his teeth politely. "Who makes this great structures, please?"

"We're not sure," Dr. Aiken told him. "It was huilt many, many years ago. By a race now vanished."

The small captain looked excited.

"Many years? A—a *ber-oo* race, perhaps?"

Now it was the doctor whose eyes widened.

"Blue! Did you say a *blue* race?"

"But, yes!" answered the Jap. Everyone knew that long ago there dwelt on earth the hlue-skinned gods. "The legends of my peoples speak of them," he said. "The *Kojiki* tells how they hrought to mankind wisdom, and—" he continued serenely—"when they departed, it was ordained that my people should henceforth rule the world."

Dr. Aiken had completely forgotten, now, why the Jap was here. This was another precious piece fitting the jigsaw puzzle he was striving to put together. He cried to Lake and Ramey, "Hear that? In the *Kojiki*, too! The ancient Japanese Book of Records!

"Stop!" shouted Ramey, leaping from behind the idol

That makes four places I've found reference to blue ones.* The Hindu folklore tells of them; the Druidic ritual worships blue warriors. I tell you, lads, Angkor is a vital link in the chain of Man's past! We *must* find a way to read the writing. When we do—"

Then his words died abruptly. A call had risen from across the moat. Soldiers, standing at the edge of the cane-grove, were gesturing, shouting. As he listened, the smiling captain ceased to smile; Dr. Aiken, who apparently understood at least part of the message, glanced suddenly, worriedly, at Ramey. In an undertone he breathed, "Your airplane! They've found it! And—and somehow they know you're one of— Hurry! We've got to get out of here!"

He tugged at Ramey's sleeve. But even as they edged away, the little captain turned, his eyes hard and angry, his friendliness vanished.

"A moment, please! You have lied to me. Halt! or it is necessary to—"

His revolver was already halfway out of its holster. But swiftly as he moved, Lake O'Brien was even quicker. With a sudden twist, Lake wrenched the gun from his hand, shoved a leg behind his knees and shoved violently. The small captain went sprawling and—

"Come on!" cried Lake, "up to the temple."

He cried a needless warning. For even as he shouted the Jap leader's voice screamed a shrill command. Soldiers came running from every section of the court, and the brooding silence of Angkor was shattered with the sharp, explosive crack of a modern rifle.

IN THAT moment, when it seemed impossible the racing four could cover four hundred vulnerable yards, relief came from an unexpected source. From around the corner of the temple charged two uniformed warriors of Nippon. Beyond them lay temporary safety but—how to pass them? Already one was raising rifle to shoulder, his finger tense on the trigger. Then from the building itself snarled the bark of an automatic. The Jap jerked as though sledged with the blow of an invisible ramrod. His jaw dropped suddenly and the gun flew clattering from his hands as he doubled and pitched forward. Then another shot from the same source; another, and yet another. The familiar voice of Red Barrett boomed from the portico.

"Keep coming, kiddo! We're covering you!"

Four hundred yards is a meager distance, but it seemed like miles. Ramey Winters gasped to his comrades, "Duck! Zigzag! Bad target!" and set the example, hunching, shifting his course like a frightened crab, as he scuttled for the gateway.

His own pistol was in his hands. He used it once to take a flying potshot at a brown-clad figure emerging on an upper terrace, and had the satisfaction of

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* Follows another reference which would have interested Dr. Aiken:

"I accept that, in the past . . . inhabitants of other worlds have—dropped here, hopped here, wafted, sailed, flown, motored—walked here, for all I know—been pulled here, been pushed; have come singly, have come in enormous numbers; have visited occasionally, have visited periodically for hunting, trading, replenishing harems, mining; have been unable to stay here, have established colonies here; have been lost here; far-advanced peoples, or things, and primitive peoples or whatever they were: white ones, black ones, yellow ones—

"I have a very convincing datum that the ancient Britons were blue ones. Of course we are told by anthropologists that they only painted themselves blue, but in our own advanced anthropology, they were veritable blue ones—

"Annals of Philosophy, 14-51: Note of a blue child born in England. That's atavism!"—from *The Book of the Damned*, by Charles Fort.—Ed.

seeing the figure duck hastily out of sight, howling with pain and dismay as the riflestock splintered in his hands.

Lake, too, was emptying his commandeered pistol at such targets as presented themselves. With what success Ramey had no time to judge, for a hedlam of gunfire howled about them now; hot lead glanced screaming off ancient stone.

How they won through that maelstrom of seething death, Ramey could not afterward say. He was only conscious of his own plunging motion, dimly aware that all three of his companions were still on their feet and racing forward with him. Once a puff of glittering powder leaped from the causeway inches before him, and coarse, stony granules lashed his face stingingly. Once a voice beside him grunted, and glancing up he saw that Lake O'Brien's shirt was redly plastered to his shoulder.

Then suddenly the heat of the day, the dancing sunlight, were gone. Grateful murkiness engulfed them, and friendly hands tugged them to shelter. Red Barrett's voice bellowed in his ear, "Nice, going, pal! I thought for a minute you wouldn't make it. Them damn yellow devils!"

Then a cooler, grimmer voice crisped orders. "No place to stop. This spot's too vulnerahle. They'll shoot us down like trapped rats. Below, everybody!"

And again they were running, this time down a shadowy ramp to the entrails of the temple, to the hulwarked suite of chambers wherein Dr. Aiken had estahlished his headquarters. Behind them the *spang!* of rifle fire died away, hut there followed them down the corridor the shrill cry of the Japanese captain rallying his men.

Dr. Aiken seized a moment of respite to offer thanks.

"You saved our lives, hoys," he panted. "But—hut how did you happen to be up there? I ordered you to stay below—"

"It was *his* idea," claimed Red.

Syd O'Brien grunted gloomily, "Knew there'd be trouhle. Got out the guns. Left Johnny with Sheila. Figured Red and I better go topside to make sure everything was all right."

His hrother chuckled appreciatively. "Well, this was once your dismal hunches paid off, Cassandra.* Now wait a minute, Sheila—don't get excited!"

THEY had reached their refuge. From it Sheila Aiken rushed forward to greet them, exclaiming at the twin's wound. "You're shot, Lake! What happened? Did they—?"

"I'm all right," Lake assured her. "Just barely grazed me. Everybody in? Watch that door, Ramey. What happened? Why, those damned, stinking little Japs spotted Ramsey's plane, that's what."

"But we knew there was a possihility they might do that," said the girl. "That's why we dressed Red and Ramey as memhers of our party. Why should that cause them to—?"

Dr. Aiken said gravely, "I can't understand it myself, Sheila. But somehow the soldiers learned Ramey was one of the aviators. That's what they called to their captain. Wait a minute! What's that? I hear footsteps!"

"It's all right," called Syd. "It's just Johnny. He's got Sheng-ti with him. This way, Johnny. You all right? Where've you heen?"

Grinnell entered, his face serious. "I

* Cassandra, daughter of King Priam of Troy, was said to have been loved hy the god Apollo, who gave her the gift of prophecy. But afterward, offended with her, he rendered the gift unavailing hy ordaining that her predictions should never be believed!—Ed.

ducked down to the digs when the shooting started, told the workmen to head for Pnompenh, get a message to the consul there. Lake! Your shoulder!"

"Only a flesh wound. Where did *he* come from?"

"Sheng-ti? Oh, I bumped into him in the causeway. I told him to beat it but he insisted on shuffling along. Look, Sheng-ti, you'd better get out of here. This is bad. Trouble. Danger. Savvy?"

The *bonze* was paying no attention to bim. His eyes bad lighted upon Ramey Winters. Now he raised both arms high above his head in a jeremiac gesture. His voice rolled stridently through the vaulted chambers. "*Aiee!* Doom! Doom! When the bird man drops from the skies—"

"Very well, Sheng-ti. That will do," Dr. Aiken silenced him curtly. He turned to the others, frowning. "Well, there's your answer."

"Answer?"

"How tbe Japs found out about Ramey. Sheng-ti must have shouted his mad prophecies in their hearing, pointed Ramey out. Well, what's done is done. We might as well make the best of it."

Ramey's brows were knotted anxiously. "This has gone far enough, Dr. Aiken. Red and I can't stay here a minute longer. We've gotten you into trouble as it is. We're pulling out, *now!*"

The arcbeologist shook his head. "Thanks, hoy, but it's no use. We're all in the same boat now. Have been ever since we defied tbeir orders, returned their fire. They're resentful little beasts, tbe Japs. And don't condemn yourself. It's not altogether your fault. Our work here was finisbed the day they marched into Indo-China. If it hadn't been this they would have found other excuses to close in on us.

"No, the only thing we can do now is hold the fort. Try to defend ourselves until one of the coolies gets word to the American consul about what's going on up here. And I'm afraid our future actions will be determined entirely by our little yellow friends. Whether it is to be truce or war is a decision they must make—"

"A decision," interrupted Syd O'Brien from the vantage point over which he stood guard, "they've already made. It's war, Doctor! Because here they come now!"

CHAPTER V

Flight

IT WAS not strange that in this moment of peril, when the chips were down, Ramey Winters should be the one to seize the reins of command. He was a soldier, a trained fighting man. It was sheer instinct that spurred him into action. Once, several hours before, he bad studied this room with the wondering eyes of one haffled by mystery. Now he studied it again, this time with the sharp, critical gaze of a fighter appraising a salient.

The hall in which they stood was a closed square, roughly, fifty by fifty, on the lowest level of the temple. Its walls were two feet thick, and it had no windows, but it was still precariously vulnerable because at the center of each of three walls gaped wide, arched doorways, and the fourth wall was fed by a smaller entrance.

Ramey asked swiftly, "These doorways—where do they lead?"

Syd O'Brien pointed to each in turn. "North wall—outer staircases from the moat. West wall—terrace. The south entrance is the way we came in. The little door leads to the inner court. They'll come from the west and south."

"Okay. That's where we'll concentrate our defense. Red—you and Lake and Dr. Aiken guard the west entrance. Syd and Grinnell and I will hold the south."

"How about me?" demanded Sheila Aiken angrily. "I'm as good a shot as—"

"You have the most important job of all," Ramey told her grimly. "Keeping the guns loaded for us. Put all the guns and ammunition on the table between us. Here—" With a heave he cleared the surface of a massive laboratory desk. Dr. Aiken winced as piles of carefully sorted ceramics, heaps of precious notes, spilled helter-skelter to the floor. "Sirabhar will help you. I suppose we can't count on Sheng-ti. No? Then you and Sirabhar will have to keep an eye on the north and east entrances. Not much chance of their getting in that way, but—"

Red said, "Lot of furniture in this room, Ramey. Chairs and tables and stuff. Make good barricades."

"Good idea!" All right, everybody, hop to it! Time's getting short."

Time was getting short. So treacherously short, in fact, that working feverishly they had barely succeeded in setting the rude beginning of their barricades before the vulnerable doorways when the attackers hove in view. Johnny Grinnell gave the alarm.

"Here they come, Ramey! Around the edge of the terrace wall. Six . . . a dozen of them. I don't see the captain, though."

"You won't," bellowed Red. " 'Cause he's over here. They done what you figured, Ramey; split up. They're coming at us from both sides. Well—"

"Wait!" snapped Ramey. "Don't shoot unless they do!"

Red lowered his rifle reluctantly. "Damn if you ain't the—the *pacificest* guy I ever saw! Always letting the other guy get the drop on you. It gives me a pain in the—*Wow!* There it comes! Well, I can shoot, *now!*"

For his sentence had been punctuated by a simultaneous opening fire from both attack parties. His own gun barked answer. And this time, more ruthlessly, more determinedly than it had waged before the battle began on the upper causeway continued.

THERE was no time for the details of that fight to register coherently upon Ramey Winter's brain. But later he found etched in his memory sharp, indelible highlights of those frenzied moments.

His own gun, spluttering and coughing against his cheek as he crouched at the edge of the doorway, firing at figures that slipped, wraithlike, through the murky corridor. The incessant, crashing echo of what seemed like a thousand guns; here in these vaulted depths sound smashed back upon itself thunderously, seemed to merge with the thickening, acrid smoke and roll about the room in reverberant waves. Red Barrett, holding his heavy rifle pistol-wise in one hamlike paw, dripping curses in a loud, prolific stream as with his free hand he tucked into place the edge of a raveling bandage. Syd O'-Brien, scowling at his side, methodically pumping his shots where they would do the most good. Lake O'Brien, across the room, achieving the same reult with roars of boisterous glee.

Other details. Dr. Aiken's plaintive moan rising above the crash of gunfire. "Those carvings! Those priceless carvings! Ruined!" A glimpse of Sheila Aiken, an angel yet, but an avenging angel now; face smudged and sweating, white hands flying like shuttles as she reloaded the hot, empty rifles and lined them again within reach of the fighters. The whining sing-song of Sheng-ti,

stalking up and down the room, invoking something of his placid, contemplative god; whether a blessing or a curse Ramey could not tell.

Then Sheila's voice rose, shrill, alarmed. "Johnny! Ramey! At the court gate!"

Ramey spun to the small east doorway, rifle leveled. But even as his sights centered on a yellow face, Syd O'Brien's arm knocked up his gun. The bullet gouged flecks from a priceless mosaic. "Don't! It's Tomasaki! Call bim, Sirabhar! Get him to help!"

Sirabhar slipped from table to doorway, called to his companion in their native tongue. An answer quavered back, highpitched with terror. Sirabhar turned.

"He say he no dare, Master sahib. He say he do not wish to fight the Little Ones. They too many and too strong."

There was anger and contempt in the loyal aide's voice. He called again to his fellow-countryman, his words a liquid blur in the tumult. An answer piped back. Sirabhar's small frame stiffened, his soft brown eyes were suddenly dark hits of flinty shale. His face contorted; he spat into the gloom and whirled to Dr. Aiken, his voice shrill, accusing.

"Tomosaki no good friend, Master Doctor. Him coward. Him—"

His words ended suddenly. Too suddenly. Ramey, who had turned again to tbe defense of his post, risked a backward glance—and was in time to see the staunch little Camhodian reel and topple forward, clutching, with fingers that seemed to spurt blood, at a gaping hole in his chest. Sheila screamed, and beside Ramey, Syd OBrien growled a thick curse. Tbey were the brown man's obsequies. He was dead before he bit the floor.

BUT there was no time to mourn him now. For Barrett, who had swung from doorway to table for a recharged weapon, roared suddenly, "The ammunition! Is that all we have left?"

The girl nodded. "That's all here. There's more in storage, but—"

Ramey, sweeping the table with a glance, saw that their supply had dwindled to a lone container of cartridges. Enough to account for every one of their attackers, yes—if every shot could he trusted to take its toll. But with six people firing steadily, indiscriminatly, against a diverse attack—

"We can't defend this place any longer," he roared. "They'll take us in five minutes. Too many entrances. Doc, is there any other—?

It was Lake who answered. "Yes! That underground chamber I found. It has only one entrance. One armed man could defend that for a week."

"But—can we get there?"

"Through the court exit."

"That's the ticket, then," shouted Ramey. "Lake, you lead the way. Then Sheila and Dr. Aiken. Somebody grab Sheng-ti and take him along. They'll murder him if we leave him behind. Ready, everybody? Go, now. Orderly. We'll all make it."

There came one contradictory voice. Out of a sudden, ominous hush that descended as briefly no rifle anywhere was barking, came the faint, dissenting voice of Johnny Grinnell.

"Not . . . all of us, Winters."

Ramey, swiveling, saw with horror that the youngster was no longer on his feet. He lay asprawl on the hard stone floor behind the barricade. His rifle was still clenched in one white-knuckled hand, but his other hand gripped his belt as if to stifle a gnawing fire there. And the fingers of that hand were dark with a slowly spreading stain.

IN A flash Ramey was on his knees beside the younger man. Dr. Aiken,

too, and Sheila.

"Johnny, what's the matter? You're not—"

Grinnell tried to grin. An unfortunate attempt, for with the effort suddenly he coughed and the corners of his lips leaked blood. He spat and shook his head angrily.

"Lucky . . . shot! But I guess . . . it did . . . the trick."

"You'll be okay," Ramey told him gruffly. "Barrett! Syd! Give me a hand here—"

But even as he gave the order his eyes found Dr. Aiken's, and the old man's head shook slowly from side to side. His lips formed soundless words.

"No use, Ramey."

The voice of Grinnell echoed. "It's no . . . use, Ramey. I was a . . . med student once." His eyes hardened to a granite doggedness. "You others . . . beat it! Get out of here while . . . you can!" Again a paroxysm of coughing seized him. When it ended his shirtfront was not pretty. He wiped at his lips with a grimy forearm, cried feverishly, "Get out . . . damn it! Get out . . . I say!"

Then a sudden thought struck him. He turned to Ramey. "No, wait! Lift me . . . to the doorway there—"

Red spoke warningly from the west entrance. "They're closing in, Ramey. I think they're going to rush the joint."

Ramey bent, raised, and cradling the mortally wounded Grinnell in his arms like a gangling child, carried him to the spot he had begged to be taken. Grinnell's lips twitched in a feeble smile. "This is . . . swell. Now give me a . . . rifle, Winters . . . and get the hell . . . out of here. All of you."

Ramey looked at Aiken—the doctor nodded. One by one they abandoned their posts, slipped into the narrow corridor beyond the prostrate figure. Sheila was sobbing softly. Syd O'Brien's face was a mask of pain and rage; even Lake was grim as he stopped to wring Grinnell's hand in last farewell.

Only over Grinnell's white lips hovered the ghost of a smile. Ramey and Dr. Aiken were the last to pass him. He searched their faces with eyes already uncertain. "Don't worry about . . me . . . Doc," he whispered. "Just get even." A shudder trembled through him; he drew a faltering breath. "Wish I could go with you . . . though. It's . . . a strange journey . . . you're going on. A strange journey . . ."

Dr. Aiken tapped his forehead significantly. "Delirium," he whispered.

Then Red's voice boomed from the background. "Ramey! Doc! Come on! They'll be busting through in a minute."

And he was right. Already figures were closing in on the abandoned barricade. Ramey gripped the old man's arm, propelled him by sheer force down the corridor. They had covered perhaps a hundred yards when they heard the lone, explosive crack of a rifle, Johnny's rifle. Then another shot . . . then a volley. Then silence . . .

THEIR way led them from wide corridors to smaller ones, then down a slow ramp to a passageway narrower still and almost completely lightless. The only illumination came through squares of stone fretwork high on the walls.

Ramey judged they were below ground level now. Sheila Aiken, behind whom he stumbled, verified his guess.

"We're beneath the main altar room. Ventilation ducts at bases of statues there. That's how Lake discovered this place."

Then abruptly they turned a corner and the subterranean chamber lay be-

fore them. It, unlike any of the other chambers Ramey had seen at Angkor Vat, was doored with a great barrier of bronze. They tumbled into the room, Syd O'Brien and Tomasaki, Red Barrett and the still bleating *bonze*, Sheng-ti, Lake and Sheila, Ramey and Dr. Aiken bringing up the rear. Ramey shut tbe huge door after them, clanged into place a ponderous lock-bar, and with a sigh of relief, turned to view his new surroundings.

This was a small room, barely more than twenty feet on a side and of equal height. A pallid light filtered down from a grilled mosaic at roof level. Lake O'Brien augmented this illumination by igniting a flambeau ensconced on the wall. The torch crackled and flamed bigh, casting a fitful, tawny gleam over carven walls, and—something else. The object Dr. Aiken had mentioned. The inexplicable cube of wrought metal standing in the middle of the room.

Ramey stared at the thing incredulously.

"Why, that—that thing's *modern!*"

Dr. Aiken nodded somberly. "By all laws of reason and logic," he assented, "it should be. But its location and the inscriptions argue differently, Winters."

Ramey tapped the thing with his pistol. It echoed metallically, hollowly. "But the ancients didn't know how to work with metals like this. This isn't silver or brass or even iron. It's—it's steel!"

"Guess again," grunted Syd. "It's not even steel. We haven't been able to figure *what* it is. Some unknown alloy."

He was, Ramey thought suddenly, getting almost as bad as Dr. Aiken. Fretting over archeological problems at a time like this. He abandoned the question for the time being.

"Well, no time to worry about it now. We've given tbe Japs the skip for the time being, but we're still not out of the woods. Now that we're down here, what do we do next?"

LAKE grinned at him. "We sit," be said, "tight. And wait for them to get tired looking for us. We hightailed it down here so fast, Ramey, you probably didn't notice tbe passageway we came through was a veritable labyrintb. It took me months to locate this place, and *then* I only stumbled across it by accident. The Japs are nervous, impatient little devils. Tbey'll never find us here. In a few hours, a day at the most, they'll decide we must have somehow escaped from the temple grounds, beat it back to ask their base commandant what they should do next. When we're sure they're gone, we'll lam out of here."

"Sounds good. Meanwhile, what do we do about food and drinking water?"

"We do without, I guess," admitted Lake.

For the first time since their flight from the room above, the little native spoke up.

"Excuse, please, Master sahib, sir. *I* will go topside. Bring back food and water."

Ramey stared at him in astonishment. A little while ago Tomasaki had been limp with terror. Now he was offering to take a foolhardy risk on their behalf. It didn't make sense. The little man had undergone a complete change of heart or—

Suddenly Ramey thought he understood. For his keen gaze detected jittering nerves in the native's hopeful offer. The rising intonation of Sheng-ti supplied the missing clue.

"*Aiee!* Doom!" the shaven *bonze* was crying. "Woe to all men when the chamber of change be violated; when

the gods of the past shall walk!"

Lake, too, understood, and stopped the little man as he edged toward the doorway. "No," come back here, Tomasaki! It's too risky. They might see you." He grinned at his friends. "I don't know how the rest of you feel, but me, I'd rather have an empty belly than a full carcass."

Red Barrett had been staring in awed wonderment at the mysterious metal cube ever since Ramey had tapped it. Red was a great guy, hut he was not the world's fastest thinker. Now comprehension seemed to dawn on him with an almost audible sound of gears meshing. He said to Ramey, "Hey, Ramey! That thing's *hollow!*"

Dr. Aiken said, "Yes, Barrett, we know that. But so far we have heen unable to find any way to open it."

Red started to scratch his brick pate automatically, winced as his hand touched handages. "You know what? I bet I know what that thing is. I seen a picture once, hack in the States Bela Lugosi in *The Wife of the Werewolf*. He was one of them whacky scientists —'scuse me, Doc—and he had a cabinet something like this. Only it really wasn't no cahinet at all. It was a secret entrance to an underground tunnel.

"I betcha that's what this is, too. A passageway which goes down under the moat, maybe, and out beyond the temple. Them old priests used to be keen on things like that. Course they didn't mess around with keys or nothing. They had trick doors you had to work out on like an osteopath. Like you'd punch on this little knoh here, and maybe wriggle this hunk of carving—*Holy cow!* Lookit, Ramey!"

He leaped back, startled. Nor was he the only one whose jaw dropped in sudden wonder. Call it coincidence, call it Fate, call it an incredihle permutation of chance—but while explaining, Red's fingers had fumhled upon the comhination required to unlock the gate of this ancient mystery. With a groan of protest, one outer face of the strange cube was swinging open!

CHAPTER VI

Across Time

RED BARRETT was the first to hreak the silence that hlanketed the little group.

"See, Ramey?" he cried. "Look at that! What did I tell you! Now, I bet there's steps in that thing. A trapdoor or something."

But womanlike, it was Sheila Aiken who, obeying the Pandora impulse, stepped forward into the open cuhicle. Darkness swallowed her like an engulfing maw. Dr. Aiken cried out in swift alarm, "Sheila! Be careful!"

Her voice came back, excited hut unfearful, "I'm all right, Daddy. And —Barrett was right! There *is* a ladder in here. But it goes up instead of down! Come and bring the torch! This is the *strangest room!*"

Syd had already torn the flamheau from its hracket. Now he and the others crowded forward eagerly into the metal chamber. But if they had hoped a view of its interior would solve their questions, they were doomed to disillusionment. For the mystery of the cuhe was heightened, rather than decreased, hy that which the flickering torch revealed.

An interior fashioned and equipped like a small room; for all the world, Ramey thought confusedly, like one of those efficiently compact cahins on ocean liners. A metal hench or working tahle. Two wooden chair frames, now seatless. In one corner a stiff pallet. Everywhere mouldering dust that fumed upward as their feet scuffed the

floor; dust that must, be Ramey realized suddenly, the detritus of ages. The wheezy puff they bad beard as the door swung open was proof that the cubicle was nearly airtight. That which eddied about them now, tickling their nostrils, must be the dust of less permanent materials than metal and wood, disintegrated by slow years. Those wborls beneath the seatless chairs might once bave been rush or tapestry; the thick, powdery fluff on the pallet be the residue of vanished bedsilks.

But it was foolisb to conjecture on things vanished when so many tangible wonders greeted the eye. For as Sheila bad said, a ladder climbed the near wall to the ceiling; on tbe wall before one of the chairs was a panel, and on this panel—

Ramey's eyes bulged.

"Doctor!" he cried. "Those dials! Those levers!"

Dr. Aiken was staring at the panel like one who sees a lifetime of reason and learning collapse before him. "I—I can't understand it!" be stammered weakly. "Machinery? But the ancients had no knowledge—"

RAMEY, moving forward, kicked something. He bent and picked it up. It was as incomprehensible as the panel. It was a metal arch about three feet long, supported by a crossbrace upon which was mounted a sealed cylinder, also of metal. Tbe instrument was equipped with a rest carven to fit the shoulder. Its semi-circular portion was pierced on the outer rim at one-eigbth inch intervals with tiny holes, and where the hoop joined the cylinder there were wbat seemed to be two bandgrips equipped with finger-studs.

Instinctively Ramey raised it to his shoulder. It balanced like an archer's crossbow, except that it had neither stock nor projectile grooves. That it was a weapon of some sort he had no doubt. An impulse stirred him to press the stud beneath his trigger finger, but he subdued it. It would be folly to test a weapon of unguessed nature in such confined quarters.

In this weird moment he bad forgotten everything save his own excitement. Now a cry dragged him back from the world of wonder to the world of actuality.

"The door!" roared Lake O'Brien. "It's closing!"

Whirling, Ramey saw the unguarded metal shield swinging shut. With a hoarse cry he leaped toward it. His shoulder and that of Lake smashed it at the same time. But the bruising impact was in vain. Even as they struck it there came the *snick!* of clasping locks. They were sealed in the metal cube. And Syd O'Brien's voice told why.

"It didn't close!" roared Syd. "It was closed *on* us—intentionally! Tomasaki!"

Ramey, glancing about him, realized that of their number all were present but the little brown man. Suspicion, latent until now, flared into sudden understanding.

"Then *he's* the one! The one who showed tbe Japs the 'plane, told them who I was! He's been with them since the beginning. Sneaked around to betray us at the east gate, and probably shot Sirabhar bimself wben Sirabhar tried to warn us."

Lake boomed, "By God! That's why he offered to go after supplies! So he could reveal our hiding place. He's probably gone to fetch the Japs now, the traltorous little—"

As ever, Dr. Aiken's bead was leveleest in a crisis.

"There are Quislings in all races," he said sadly. "It's too bad we discovered the enemy in our midst so late. But

we bave no time to waste in recriminations. We must get out of here before the soldiers come. The ladder—where does it go?"

Red had mounted the rungs, was fumbling above bim. Now be called down, "It's a trap-door of some kind, Doc. Just a minute and— Oucb! This damn catch is stuck. There it comes—*oh-oh!*"

Hastily he let drop back into place the yard-square sbeet of metal he had pried open. Ramey looked at him anxiously. "What's the matter, Redbead?"

"This thing opens rigbt smack into tbe main altar room," whispered Barrett. "There's a bunch of Japs up there snooping around. They almost seen me."

"Then we—we're trapped?" asked Sbeila faintly.

Ramey's eyes narrowed. "Not yet! That trap door gives us a chance. When Tomasaki leads tbe Japs down here, emptying the courts above, we'll beat it out that way!"

HE GLANCED at Dr. Aiken commiseratingly. "Tougb luck, Doc! Just when you make the greatest find of your career, we have to duck out. But maybe someday we can come back and figure out this mystery. Meanwhile we ought to try to find some way to lock tbis door from the inside. Tomasaki's just clever and treacherous enougb to have seen how Red opened it. We've got to try to stall the Japs for an bour or so to give us a head start. One of these levers might be tbe answer."

He stared at the wall panel dubiously. Dr. Ian Aiken said, "I don't know, Ramey. It's foolhardy to experiment with things we don't understand. I'd be careful if I were you."

"It's now or never," Ramey reminded bim. "In a few minutes it'll be too late to experiment."

He stepped toward the largest of several levers. As he did so a shrill cry sounded behind him. A mournful cry of terror.

"*Aiee!* Out of the chamber of the past comes doom! Doom to tbe men of the earth and of not-earth!"

"Will somebody please gag that perambulating wailing-wall?" demanded Ramey irately. "All right, everybody—look sharp! I'm going to try it easy. If you see anything bappening, holler! And be careful no trap doors open beneath you. Okay! Here we go!"

He laid his hand on the upright strip of metal and pulled it slowly toward him. But nothing happened. So long had it rested unused that it seemed welded to the plate on which it stood. Ramey tried again, more forcibly. Still no result. He hunched his shoulders, took a good grip. This time he wrencbed at the lever with every ounce of power in his six-foot frame. And—

The rod gave suddenly, jolting back in its groove, burying its handle in the pit of Ramey's stomacb, jarring the wind out of him. Ramey sat down, abruptly. A startled *"Ooph!"* burst from his lips. Then as be caught his wind, a grin overspread his features. "Did it!" he claimed triumphantly. Then as he stared about him, seeing no change in eitber the room or bis companions' expressions, bis eyebrows raised. "But now that I did it," he demanded plaintively, "wbat did I do?"

"You pulled a little stick," said Red genially. "Only nothing happened. I'll give you a recommend if you ever need one. Chief stick-puller and nothing-happened."

But one at least did not sbare his mirth. "Wait!" Sheila Aiken cried suddenly. "Something *did* happen! Listen—a humming noise—"

IT WAS so. Singing so faintly through the cubicle as to be almost inaudible was the thin, far moan as of a diminutive motor heard from a vast distance. And where Ramey's hand touched the floor, he thought he could detect just the faintest, the barest, tingle of vibration coursing through the metal. Nor was this just an hallucination. Because—

"It *is* a motor!" cried Dr. Aiken. "We must be moving! For, see? The panel!"

Ramey's eyes followed the archeologist's finger. On the curious instrument panel before them was a circular dial. And the pointer of this dial was slowly revolving!

Red Barrett, who had clambered down the ladder, took one startled look at the spinning needle and started up again. "Excuse me, folks," he gulped, "I just remembered I got to see a guy about nine million miles away from here!" His hands fumbled for the latch of the ceiling trap door.

Dr. Aiken stayed him with a sharp command. "No, Red! Don't!"

"H-huh? Why not?"

"Because something is happening to us. Obviously, we are moving in some direction or other. It might be perfectly safe to open that trap door, but on the other hand—well, I think it would be better to wait until the needle reaches the end of its circuit."

"If you ask me," vouchsafed Syd O'Brien gloomily, "we've probably marched ourselves right into some sort of ancient torture chamber. An Iron Maiden, or something like that. We'll probably end up under the moat or being cooked in boiling mud—" He stared about him suspiciously. "Do these walls look like they're closing in on us?"

His brother chuckled. "Cheerful little cherub, isn't he? I agree with the doctor; you shouldn't open that trap door just yet, Barrett. But I don't think we're in any danger. Evidently this chamber was a secret of the ancient priesthood. They wouldn't build anything to hurt themselves. Wherever it's taking us—"

"Taking us?" interrupted Ramey. "What's all this talk about movement? We don't seem to be going anywhere."

DR. AIKEN permitted himself a thin smile. "Spoken like a true airman, Ramey. I'm afraid your profession has accustomed you to judge motion by external appearances. Within this closed chamber we have no object relative to which we can judge speed or direction. But by the hum of the motors, movement of these several dials, it is perfectly obvious we are doing *something*. Just what, I cannot say." Here a frown flickered across the forehead of the older man. "It is quite true that if we move either up or down there should be a visceral sensation similar to that experienced in elevators. Similarly, were we moving in a lateral direction we should have felt the shock of overbalanced inertia when we started in one or another direction. Since we did not feel these things there is only one other possibility, but it is so fantastic—"

"It ain't fantastic," broke in Red Barrett. "It's whacky. We ain't going up or down; we ain't going sideways. That's all the directions there is."

"All the *common* directions known to man," corrected Dr. Aiken slowly. "There is one other about which we know absolutely nothing. A direction of flight which is, as best, but a mathematical concept—"

This time Sheila Aiken stared at her father. "Daddy, it's unbelievable. You can't mean—?"

"I venture no opinion," said the old

man mildly. "I am simply trying to apply to a most unusual situation the rules of logic."

Ramey gave up. He looked at the girl helplessly.

"What does he mean, Sheila?"

There was equal helplessness, and for the first time, an expression of uncertainty, in the girl's eyes as she answered. "He means—we may be moving across Time, Ramey!"

"Time!" For a moment Ramey was jarred completely out of his self-possession. Then his sense of humor came to his rescue. "Oh, come now! We *are* letting ourselves go hogwild! It's been a hell of a day, I know. And we've had some unnerving experiences, but—*Time!*

Syd O'Brien did not share his scorn. The more sober twin nodded moodily. "Nevertheless, it's a possibility, Winters. Time is a dimension just as truly as height, breadth, depth. Some have called it the Fourth Dimension and evolved the concept of a Space-Time continuum wherein all things past and present exist side by side. Even the man-in-the-street acknowledges the dimension of Time in his every day life. When he says he will meet a friend at Broad and Main Streets, his directions are inadequate unless he specifies the *floor,* for if he is on the tenth floor and his friend waits at ground level they will not meet. The third dimension, height, must be taken into consideration.

"Similarly, if he tells his friend he will meet him on the tenth floor of a building at Broad and Main, and he is there at ten o'clock but his friend does not arrive until two, they will still not meet—for they did not take into consideration the Fourth extension, Time."

"I understand that," acknowledged Ramey impatiently. "But to speak of *crossing* Time or 'traveling through' Time—that's absurd. Sheer nonsense for imaginative fictioneers to toy with."

THE old scientist stared at him quizzically. "I wish I could be as sure of that as you, Ramey. Unfortunately, science is forced to admit too many contradictory points of evidence to make such bold statements. I might mention the strange case of the two Twentieth Century American lady-tourists who, strolling in the gardens at Versailles, found themselves suddenly translated, incomprehensibly face to face with members of the Eighteenth Century royal French Court. This record is, unhappily, too well authenticated to ignore. I might also point to the accuracy of the prophecies of Michel de Nostradamus who claimed that by means of his magic he was able to move forward into the future and see those things which were to be.*

"Many other instances. An Italian record of a stranger who appeared mysteriously in Sicily some two hundred years ago in a machine, the description of which shows a marked resemblance to a rocket-propelled airship. Legend relates that this wise man, who spoke a curiously distorted English, made his home with the natives for several months, taught them new and better methods of husbandry, instructed them

* Michel de Nostradamus, most amazing of all prophets, not only accurately forecast major world events for many hundreds of years but supplemented his prophecies with the *exact dates* as well as the names of *persons* and *places* involved. So highly is he regarded on the continent that at the outbreak of World War II, more than five new editions of his book, *The Prophetic Centuries,* were rushed into print to supply the demand of Frenchmen eager to learn the outcome of the new strife.

Unhappily the prophecies of Nostradamus suffered the fate of those of Cassandra. Few believed his statements that France would be betrayed from within, Paris fall, and the greater part of the nation be occupied by German forces —Ed.

in the construction of mechanical devices, and stayed an incipient plague by medical means unknown to that era."

"Still," expostulated Ramey," to travel across Time—"

"As a hazard," pursued the old man, "let us suppose the continuum of Space-Time may be likened to a huge volume in which is inscribed all the history of past, present, and future. All things are written there—*all*. From man's darkest beginnings till the last feeble flutter of a dying sun stills in cold death a forlorn earth. Man, reading this volume, must perforce turn the pages one by one. He has memory of that which he has read, comprehension of that upon which his eyes presently rest—but no knowledge whatsoever of what lies before.

"But there is another pathway through this volume. The creeping pathway of the bookworm. This is the shortest route between era and era. Through this infinitesimal tunnel the bookworm—or let us say a 'time machine' constructed by one who knows the manner of its making—can skip from epoch to epoch in the twinkling of an eye."

Ramey stared at him incredulously. "And you—you think this thing we're in may be a sort of mechanical bookworm piercing the pages of Time?"

"I do not know," Dr. Aiken told him again. "I simply point out that at least hypothetically these things could be. I do not know; no. But we will learn in a minute. For, see? The needle has stopped. And if I am not mistaken, the humming, too, has ended."

He pointed. The moving needle had indeed completed its circuit and come to rest; the vibration was gone. Whatever had been the nature of the metal chamber's movements, it was motionless now. Red fidgeted impatiently above them.

"All right now, Doc? Okay for me to lift the trap now?"

"Yes. By all means, Barrett."

RED raised the trap-door gingerly. But no sunlight filtered into the inch-wide slit. He lifted it still farther, glanced anxiously down at his companions. "Hey, lookit! This is funny! It's dark! No, wait a minute—there's a little spot of light. And there's *another* wall here and *another* ladder."

"Give him the torch, Syd," cried Dr. Aiken. "There . . . Got it, Barrett? Go on up. Climb the ladder. See if you can find out where we are, and what—"

The flaming brand bobbed upward ten, twenty feet, for a few seconds weaved in uncertain circles, its light reflecting to those below only a gray formlessness and the foreshortened outlines of the climbing Barrett. Then:

"Ramey! Doc!" cried Red.

"What is it?"

"Come on up here, everybody, quick! Look! There's a platform up here and a couple of peepholes, and—and it's the damnedest thing you ever seen. We ain't moved an inch. We're still in the temple. But—but it ain't empty now. There's about three billion people gathered in it!"

CHAPTER VII

Gods of the Jungle

RED'S hyperbole achieved at least one result. That of creating an immediate scramble for the ladder. Within a very few minutes all the party, including even the muttering Sheng-ti, had joined him on the platform before the circular openings he had mentioned. Of these there were approximately a dozen, spaced at irregular intervals around the chamber in which they now

found themselves. Ramey, standing beside the girl Sheila, stared down upon a sight to stagger the wildest imagination.

He looked from an elevated vantage post out across a tremendous hall of Angkor Vat. But there was a subtle difference between this room and those which Dr. Aiken had shown him hours —or was it centuries—ago? At first Ramey could not name that change. Tben, with a start, he realized what it was.

Everything looked newer, cleaner, brighter. The pillars supporting the high, vaulted roof were more sharply incised, the carving more clearly cut, undulled by the leveling file of age. Furthermore, not just a few, but *all* the murals, the carvings, the multifold bits of statuary were painted, not in dull, faded hues, but in gaudy color, freshly radiant!

Tbese things were evidence enough that a change had been wrought in their lives. But if anyone needed more, the court below stirred with *living* proof. "Three billion" was a typical Barrett estimate, but there were, Ramey saw swiftly, easily three, perhaps four hundred people gathered in the altar room.

And *what* people! From every lurking corner of earth they must have sprung. Ramey gasped to indentify representatives of every race, creed and color known to man. For the most part they were Asiatics, saffron of skin, oblique-eyed. But here stood a little group of gigantic Nubians, ebony-bued and strong, draped in jewel-encrusted girdles of samite; over there gathered a band two-score strong of golden-haired, pale-fleshed warriors, fur-garbed and armed with gleaming halberds; elsewhere, anxiously whispering amongst themselves, huddled a knot of dark-haired, hawk-nosed captains with rich beards tbat curled to their breasts!

Dr. Aiken whispered hoarsely, "Then —then it is true! We *have* traversed Time! Come back to the period of Angkor's glory. For, see? Syd, tbose bearded men—"

"Assyrians," acknowledged Syd O'-Brien, "or I'm stark, staring mad. But —but that means, Doctor, Angkor is centuries older than we thougbt. Their era was around 2500 B.C."

Red Barrett gulped, "You mean that there bellywash you was talking a little while ago is *true?* We actually have come back through Time? I don't believe it!"

"I know just how you feel," assented Lake O'Brien. "I hate to admit it myself. It makes me feel like a candidate for the padded-cell brigade. But you've got eyes, Barrett. There's the proof before you. How else can you explain it?"

"I can't," snorted Barrett stubbornly, "and I ain't going to try to. This is a dream, that's what. A dream or a hally-soosynation. For all I know, maybe I got conked in the fight, and I'm delirial. Yeah—that's what it is! I'm off my button and seeing things. I don't believe none of this. You hear me—?" He swung suddenly to the peephole, raised his voice in a roar. "I don't believe in you! Get it? You guys are spooks, dreams, nightmares! Go 'way! And—Ob, my golly! *Ramey!*"

HIS words ended in an agonized howl. For his shout had brougbt an unexpected result. Real or unreal, tbe "hallucinations" thronging the ball below had an auditory sense. At Red's bellow, all murmurs, all motion, suddenly stopped—and every eye turned upward toward tbe source of those cries. Now something like a shudder coursed through the assemblage. Voices rose shrilly, a dozen figures raced bleat-

ing from the room . . . and to the last man, those left behind fell to their knees in attitudes of abject worship!

Ramey turned in confusion to the girl beside him.

"*Now* what?" he demanded helplessly.

"I think I know!" said Sheila. "This chamber we're in is the interior of one of their idols. These peepholes must be the eyes in the image. Or perhaps they are just concealed in the carving. Look underneath this opening. See that funnel-shaped pipe? That's a speaking-tube, magnifying the voice. No wonder they're excited. When Red shouted, it must have seemed their god was bellowing orders to them."

"That's it!" agreed Lake. "That was a fairly common trick of ancient priesthoods. Hollow gods from which they could spy on their followers, deliver oracular utterances. Hand me that torch, Syd. I'm going down again and look for a doorway out of this image. There must be one."

He ducked below. As he did so, there came a second concerted moan from the throng. This time Ramey guessed the reason. The flickering of the torch across the viewholes must have seemed to the watchers like the glint of life winking in their idol's eyes.

Then there rose a commotion from the far end of the hall, the babble of excited voices, and Ramey understood where had gone those who had fled the temple. To fetch someone in authority. For now there sounded the dry scrape of marching feet, the clank of metal upon metal, and into the altar room tramped a company of—

"Holy potatoes!" exclaimed Red awefully. *"Giants!"*

For giants indeed the newcomers were. An armed band of men, the shortest of whom towered a full head and shoulders above any other man in the hall. Ramey was six foot two. Red and the O'Brien brothers each also topped the six foot mark. But Ramey knew that all of them would appear as striplings if ranged beside this file of yoemanry. Six nine seemed a fair guess as to their average height, and he who marched at their head, a raven-haired, amber-skinned mountain of a man in the rich trappings of rank, assuredly topped the seven foot mark!

A MUTTER passed through the crowd as he entered, and Ramey, whose eye was trained to note the psychological reactions of men, thought he could detect in the attitude of those gathered a poorly veiled hostility, a resentment and will to rebellion held in check only by fear.

Then the newcomer spoke, his voice harsh, imperious, demanding. The natives answered, pointing fearfully at the idol housing Ramey and his companions. The giant captain's brow darkened, his eyes flashed scornful fire, and once more he raised his voice. Ramey turned to Dr. Aiken eagerly.

"What's he saying, Doc? Can you—?"

"No. It's no language I know. It sounds slightly like Sanscrit, but the syllablation and intonation are oddly different."

And then, surprisingly, Sheng-ti spoke beside them.

"Aie, doom!" he moaned softly. "Lo, the day of our judgment is at hand. For the gods walk again and speak their ancient tongues!"

Sheila gripped the old priests's arm tightly.

"Sheng-ti—you understand? Translate for us!"

"They speak of mysteries too holy for humble ears," groaned the priest. "They tell the Mighty One the idol has spoken. He laughs and says it is un-

true. But they insist. Now he mocks them, calls them fearful fools."

Red Barrett snorted.

"Oh! A wise guy, huh? A know-it-all? Well, watch me take him down a peg!" And again his lips found the tube. His voice rolled in a hollow roar. *"Tally-ho, smart-aleck! Brooklyn-dodgers . . . officeofproductionmanagement . . . gadzooks . . . How do you like them apples?"* He fell away from the opening, chuckling, as the giant's blanched face whirled toward the idol. "Guess that'll hold His Nihs for a while! What's he saylng now, Sheng-ti?"

The honze listened intently as again the saffron-hued commander spoke. But Red's gag had hackfired. For—

"The Great One admits," relayed Sheng-ti, "that the idol did speak. Now he is affrighted lest the god may have been offended. He would make atonement. Lo, he hids his warriors seize a virgin, and bear her to the altar."

At their leader's command, two of the giant yoemen had thrust forward into the throng, striking with the flat of their swords any who would hinder them. Now they tore from the arms of an aged man a young, white-skinned girl, and bore her, struggling and screaming, to the dais beneath Ramey.

And:

"Ramey!" cried Sheila in sudden horror. "We've got to stop them! They're going to sacrifice her—*to us!*"

RED BARRETT gasped, "Omigawd!" in a stricken voice, and spun to Ramey. "Why can't I learn to keep my hig feeder shut? What—what'll we do, Ramey?"

The solution came from helow, where Lake O'Brien's voice suddenly raised in a shout. "Found it, gang! I *knew* there'd be a door somewhere. Well, you Jonahs—any of you want out of this whale's helly?"

Ramey cried, "Come on, Red!" and flung himself down the ladder. Then, as the trio stood hefore the portal Lake had discovered, a sudden idea struck him. "Wait a minute! This is our chance to make an imprint on the natives!" He craned his neck, shouted to those still above. "Sheila, tell Sheng-ti to forhid the sacrifice! Tell him to say that the children of the god come forth to claim their victim."

The priest's words boomed above them, prefacing their entrance into this strange world. And—it was a great success. As the door swung open, and Ramey and his fellows burst forward onto a raised dais, it was to find all action ahruptly frozen. The slave girl, her simple toga-like garment torn and disarranged, her wealth of red-chestnut hair, loosed by the vlolence of her efforts to escape, cascading to her waist, stood motionless in the grasp of two stricken fighting men. Elsewhere a silence horn of terror gripped the room An awed paralysis which was shattered by the terrified screams of a hundred throats as the adventurers appeared.

It was, Ramey could not help thinking with a sort of detached amusement, a most dramatic entrance. A super-extra, whipper-dipper of an entrance. Like all men with a sense of humor, he had an instinct for showmanship. Striding forward he realized with a little shock that throughout the excitement of the past half hour he had continued to clench in his left hand the object over which he had stumhled in the time-traveling cahinet. What it was, he did not know. But it might mean something to his audience. So as he stepped forward he lifted it proudly, melodramatically, above his head.

The reaction was swifter and more astonishing than he had hoped for. A concerted gasp swept through the

crowd. The two giant guards released their eaptive and tumbled to their knees, and a great cry shook the temple. Ramey's eyebrows lifted; he tossed a swift query over his shoulder. "I struck pay dirt that time! What are they saying, Sheila?"

And apparently from the lips of the idol—for Ramey saw now that it was a gigantic, hideously leering statue in which they had hidden—came the answer.

"They're hailing you as a god, Ramey! And they are crying out in fear because that thing you're carrying is the Bow of—of Rudra!"

NOW the slave girl, whimpering prayerful entreaties, slipped from the the two who held her and threw herself at Ramey Winters' feet. It was swell stuff. Very godlike, flattering stuff. But also very embarrassing. Ramey touched the girl's shoulder, disturbed to find that she was trembling violently, gently lifted her and turned to Barrett.

"Take care of her, Red. Maybe these overstuffed guys will try to make another pass at her."

Red grinned from ear to ear. "Who, me? Oh, boy—did I say no? Come here, sugar!" He took the girl into the shelter of his arm. He didn't seem to mind it a bit.

Then from the back of the hall moved the majestically dark-visaged one who had commanded the sacrifice. He walked erect and proud, as befitted a noble, but his eyes were cautiously humble. Though he towered a full head above Winters, his attitude was respectful. To the edge of the dais he approached, stopped there and addressed the quartet. This time Shelia forwarded Sheng-ti's translation without prompting.

"He is Ravana, Ramey. Lord of Lanka, and appointed Overseer of—of something. Sheng-ti doesn't understand all he says. He bows before you and begs acceptance of the sacrifice he offered."

Ramey said grimly, "Tell him that for two cents I'd yank off his leg and stuff it down his throat. I don't like this sacrifice stuff." He motioned to Lake and Red. "Let's get back into the idol. We've saved the redhead, here. Now we'd better save ourselves. Hop back into the time-machine and go back where we came from—"

From above came the voice of Dr. Aiken, alarmed and piteously eager.

"Oh, no, Winters! Not yet! Not quite yet! We can return to our own time later. But this is the opportunity of a lifetime! We can't leave until we've learned more about this magnificent culture . . . this period! Besides —in our own era, the Japs are still hunting for us. We must allow several hours to pass before we return."

Ramey sought his companions' eyes. Lake grinned and nodded. Red tightened his arm about the shoulders of his new and welcome responsibility. "Okay with me, chum. I'm just beginning to enjoy this Cooks' Tour." Ramey surrendered reluctantly.

"All right, then. Come on down. But before you do, better tell this guy to take us to the Kingfisb around here."

Words rolled from the idol's motionless lips, and the giant chieftain nodded obeisance. And a few minutes later, the remainder of the time-traveling group spilled from their refuge within the statue.

IT WAS all strange terrain to Ramey, the way through which the amber-skinned Ravana led them, but their course was apparently familiar enough to Dr. Aiken and his assistants.

Across an open court, up a long staircase, and into tbe most central of the ziggurats wbich comprised Angkor Vat. Lake O'Brien said excitedly, "By golly, Sheila, your guess was right! You said this building was the Big Shot's council ball—remember? And Syd and I tbought— Well, I'll be jiggered!" His voice choked to a hollow whisper. "Golly, look! Tbe—tbe carvings come to life! Apes! Warrior apes!"

For standing before the door of the chamber they approached, garbed in tbe trappings of men, casqued and helmed sandaled and bucklered, gripping their bronze-tipped spears in altogether humanoid fashion, stood two buge apes who snapped their arms to attention as the group neared!

But even this marvel paled into insignificance in a moment. For now the great, carven doors of the council chamber swung open, exposing a throne-room of inconceivable grandeur. Ramey's first staggered gaze described trappings of fabulous wealth. Gold and ivory, teak and silver, ebony and the sparking luster of priceless gems. Tbese things he saw and noted subconsciously. But at the moment tbey roused no wonder in him for tbere was—something else! A presence in the room that utterly robbed him of his breath.

A man, seated on the golden tbrone. A man of Ramey's own heigbt. An older man, gray of hair and lined of visage, now leaning forward curiously to greet tbem. A grave, quiet, kindly man, in all respects like the millions of humans living on the earth of Ramey's era. But for one tbing. The flesb of this ruler was—*hyacinthine blue!*

CHAPTER VIII

Rakshasi

WITH a sort of detacbed wonder, Ramey noticed that the blue man did not rise from his throne to greet them.

Even a ruler of men, the young airman thought dimly, should bumble himself before gods. Tben tbe conviction came to him that tbe ruler of Angkor did not consider them gods! Of tbeir origin be bad, could have, no knowledge. But it was obvious that he recognized them, somehow, for exactly what they were: buman beings caught in a web of circumstances inexplicable even to themselves.

So the blue lord's preoccupation was with the giant Ravana. To tbe amber-skinned one he addressed his questions. The spate of their conversation sped back and fortb between them so swiftly that there was not even time for the attentive Sheng-ti to translate for his companions.

But though the words of a conversation may be unintelligible, its tenor is oftimes obvious to tbe careful witness. It became clear to Ramey that Ravana, at first polite in his salutation to the blue lord of Angkor, was becoming more presumptious and argumentative every minute.

His shoulders became stiffer, straighter, more bold. Once he glanced back as if to assure bimself that behind him ranged the solid phalanx of his warriors. His voice assumed a belligerent stridency, and an arrogant ligbt emboldened his eyes.

Nor was Ramey tbe only one to notice this gathering insolence. Tbe blue ruler frowned, and his tone developed an edge of asperity.

Now, however, the amber giant exhibited startling rudness. Boldly be interrupted tbe azure-tinted emperor in midsentence, and cried wbat sounded like a loud demand. A brief, startled silence fell upon the court room. In that silence, Dr. Aiken prodded the *bonze* for information.

Scanty as it was, it verified Ramey's suspicions.

"The Tall One says the gods appeared to *him;* he therefore claims the right to house their mortal avatars whilst they visit. The Blue One reminds him he is but a guest at the palace, and that he, Sugriva, is emperor of Angkor."

Lake chuckled. "Huh! Talk about your southern hospitality! It's peanuts compared to this! Scrapping over who's going to put us up for the night!"

"Scrapping" was a hit of an exaggeration. It did not quite reach that stage. But in the moment following the silence it looked very much as though it might. The tall lord, Ravana, concluding his defiant demands, turned and snapped an order to his followers. Their hands leaped to their swords, they moved as though to surround the little party of time-exiles.

But now the Emperor Sugriva had reached the end of his patience, and with a swift decision exposed the hand of steel beneath the velvet glove. He cried a word. It might have been a title or a name.

"Kohrisan!"

THE cry hrought an instant response. From one of the arched doorways of the council room, as if he had heen waiting on hair-trigger for the call to catapult him forward, sprang a strange figure. A short, gnarled figure so elaborately adorned, *cap-a-pied,* in the glittering hahilaments of a warrior that Ramey had to look twice to see it was no man at all, but another of the weirdly humanoid apes.

The monkey captain sized up the situation at a glance, lifted his voice in a cry that hore little resemhlance to the shrill chattering of ordinary handerlogs. The apparently tenantless court sprang to life. Through every portal flooded troops of the armed monkey-men to arraign themselves grimly hehind their leader. The furry captain spoke, this time directly to Ravana, who scowled at him.

For a moment it seemed Ravana tremhled on the brink of a decision. His right hand yearned toward his sword. Then he shrugged and forced a smile to his lips. He made a perfunctory, almost insulting, how to the blue-skinned lord of the jungle, then crisped a word to his followers. They turned and marched from the room. As Ravana passed the squat ape-man, he sneered a mocking taunt; the gaudily garhed little creature flinched as if struck with a blow. Then Revana and his bullies were gone, and Sugriva beckoned Ramey's party to advance toward him.

Ramey's first impression of the emperor had been that Sugriva was a wishy-washy sort. Now he was forced to alter that opinion. There was no nervousness, no uncertainty in the blue lord's manner He seemed to have weighed carefully the prohlem and arrived at a conclusion. He was a gentle man but he could act when action was required. And he was a man of penetrating intellect. He had already recognized that Sheng-ti was the only one to whom his words held meaning. He addressed himself to the *bonze.* Sheng-ti answered with a new note of humility in his voice, then relayed the message.

"The Blue One says to follow him. He would understand and be understood."

Wonderingly the little group followed Sugriva to a small privy chamber beyond the throne room. As they entered this Ramey's eyes widened to behold another metal cabinet somewhat similar to that in which they had been borne here, but of hemispherical shape. Into this the ruler motioned them. Red

Barrett looked dubious.

"Hey, what's he going to do, Ramey? Send us back where we come from? So soon? Aw, gee! Me and Toots here ain't bardly got acquainted yet."

Syd offered warningly, "Look out. It's a trick of some sort. I don't trust—"

"I think it's all right," Ramey reassured them. "Yes, I know it is. See, he's going in it himself. Come on. We'll never find out what this is all about if we don't take a chance."

He stepped into the chamber behind Surgriva. The otbers followed. The blue lord closed the door.

THIS chamber, too, had a control panel on one wall. To this the emperor went, adjusted small dials and pressed a plunger. Sheila screamed. Cries of alarm ripped the throats of Lake and Dr. Aiken. Ramey Winters was conscious that he, too, had cried aloud under the impact of a lance of fiery pain piercing his brain. From the ceiling of the chamber a radiation terrible to look upon blazed down upon them, its intangible beam of light seemed to smash them with tangible force. Ramey staggered a step forward, clutching for Sugriva. But even as he did so, he was aware that the ruler pressed another button, that the radiation had died, and the pain was suddenly gone.

His head throbbed and burned. He cried, "Damn you! What's tbe big idea? What are you trying to do to us?" But there was disarming candor in the blue man's smile. "Peace, my friend," be soothed. "There will be no more pain. It is over now."

"Over?" repeated Ramey. "It had damned well *better* be over. You can't—" Then he halted, his mouth foolishly agape, as realization of what bad happened dawned upon him.

He had spoken to the Lord of Angkor. And the blue lord had answered. And each of them had understood the other!

Sbeila Aiken stared at their new acquaintance wildly.

"You—you're speaking English!"

He shook his head, a quiet smile on bis lips. "No, on the contrary, it is you who speak my tongue. Not that it matters. We can converse in either. Now that we have undergone the ministration of the *vilyisha,'* each of us possesses the other's language." He turned to the yellow-skinned *bonze* who, heretofore, had been his sole interpreter. There was a curious comprehension and sympathy in his eyes. "And you, my friend—your brain has cleared?" *

The surly Sheng-ti was surely no longer. An amazing change had come over him; his eyes, wbicb bad ever been dark and cloudy with half-mad suspicion, were now gleaming. Ramey knew, even before the old priest spoke, what tbis meant. The mysterious *vilyisha* had performed for Sbeng-ti the greatest of all possible services. It had lifted from his brain the cloud of insanity which had veiled it for years!

Sheng-ti cried out, a choking little cry of joy, and dropped to his knees. "It is, O my Lord! Tbou knowest it is indeed clear and strong again!"

Sugriva laid a hand on his shoulder, raising him.

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* Study of brain structure has convinced medical men that the degree of buman intelligence is commensurable not to tbe size of the brain, hut by the number and depth of its convolutions. Tbese groovelike depressions in tbe gray-matter are apparently fasbioned by thought-action.

Since it is also believed that thougbt itself is an electrical phenomenon, it is altogether conceivable that a machine might be devised whereby a transformation of patterns from one brain to anotber might be achieved. The *vilyishna* of Rudra is evidently based on a refinement of some such principle as this.—Ed.

"I am sorry it was necessary to subject you to even a moment's pain. But there was no other way. The patterns of the brain are not rearranged without a modicum of discomfort." As be spoke he opened tbe door again, they returned to the room whence they had come. "You are all recovered now?"

DR. AIKEN'S eyes were tbose of a new Balboa staring out across uncharted seas of knowledge.

"The *vilyisha!* Transference of knowledge by machine! Learning by superimposition of brain patterns!" be wbispered. "Lord, what an achievement! Where did it come from?"

"It is an invention of my people," Sugriva told him.

"Your people?" repeated Ramey. "Who are your people, my Lord? In the world from which we came tbere are no men of your pigmentation. Who on earth *are* your people?"

"It was then the blue lord Sugriva smiled. Tbere was a touch of sadness in his voice. "My people are not of Earth, my young friend. They are of —another world altogether!"

"Venus!" cried Dr. Aiken suddenly. "Venus—that is your homeland! I knew it! Ramey, do you remember just as the Japanese attacked I was about to tell you of one of the oddest carvings we had discovered? That mural was a representation of the solar system, showing at the center the mother Sun, then, circling ahout her in their orhits, tbe planets of Mercury, Venus, Earth, Mars, and the other spberes.

"Two tbings about this mural perplexed us. One, that there was a definite line scored between the planets Venus and Earth, such a line as experience in deciphering Angkor's symbolism had taught us always represented 'contact' of some sort.

"The second point was that immediately beneath tbis diagam were a series of smaller carvings. One showing a forest of lusb vegetation unlike anything known to Man, anotber showing a cylindrical, sbiplike object surrounded by beavenly bodies, a third showing a troup of earthmen kneeling before a man like Sugriva. A man with blue skin. My Lord—you know the carving whereof I speak?"*

Sugriva nodded. "Indeed, I know it well. Did I not cause it to he made? In the long years that have elapsed slnce I assumed the protectorate of this Earth colony I have had my subjects carve mucb of tbe history of our people into the walls of this citadel. But more of that later. I would hear now of yourselves. You came bither in the cabinet of Rudra?"

Ramey said, "Then you *knew* of the time machine?"

"Of a certainty, my son. Was it not built hy my own blood brother, Rudra, who, until he grew restless and fretful, ruled this colony with me? Ah, he was a brilliant one, Rudra, and a great scientist. It was he who designed the *vilyisha,* aye, and even tbe Bow of Death which now you bear. Important things might he and I have accomplished had be been content to stay here with me. But a score of years ago, dissatisfied and impatient, he built in the cbamber beneath the altar room the cabinet wbich flies backward in Time. In this cabinet he made many trips into the past, returning ever and anon to amuse me with tales of marvels seen. But ever longer and more daring grew

* The mural here described is no invention of the author. It actually exists. Many and ludicrous have been the attempts of savants to give a logical explanation of its meaning. Readers of scientific fiction, less hindered by dogma and prejudice, may be willing to accept it as factual proof that at one time in history intercourse did exist between this earth and the planet Venus.—Ed.

his trips, until finally there was one from which he returned not ever, nor the cabinet in which he had gone. Tell me—and saw you my blood brother Rudra in the era whence you came?"

DR AIKEN shook his head sorrowfully. "No, my Lord. We saw him not. The cabinet was thick with dust, and Rudra's bow lay on the floor. The machine itself had lain hidden in its chamber from the sight of man for countless centuries."

Sugriva sighed.

"Then he is indeed perished. But tell me—how came you to find the cabinet? And from what ancient era came you? Rudra found many signs of life in the ages he traversed, but never a race of Earthmen cultured as yourselves."

"We are not from the Past, my Lord, but the Future."

"Future! But my brother's machine could not safely move forward in Time! He told me so. Only into the Past—"

"Nevertheless, he must have tried. For we found his cabinet in an age five thousands of years later than this."

Sugriva nodded dolefully.

"Now I can guess why he returned not. He was daring, my brother. Too daring. But—the future, you say? Tell me, then—is my small colony a great and beautiful metropolis in the period whence you came hither?"

"Not so, my Lord Sugiva," answered Dr. Aiken regretfully. "Somewhere in the centuries which span between now and our era, an evilness has befallen this colony of yours. For in the world we left behind us, these mighty halls and temples are but a haunting wonder lost in the slumbering sea of leafy jungles."

Sugriva's sadness deepened.

"This is grievous news you bring me, my friends. If what you say is true, if fifty centuries hence this colony is vanished, its people scattered, then my labors here are of no avail. And my mission on Earth has failed. But—why?"

It was a question for which the time-exiles knew no answer. Its solution lay yet in Sugriva's future, and was so far buried in their world's past as to be a forgotten secret. But they were spared the necessity of answering. For at that moment came an interruption. There wakened a flurry of action at the central gate, the doorway opened, and through its great portals swept a woman.

And *what* a woman! She was tall . . . much taller than the average man, almost as tall as Ramey himself. But there was no gangling awkwardness to her height. Her figure was perfectly proportioned to her stature. She walked with the slow and lithe and languorous grace of a jungle creature. A panther, perhaps, thought Ramey, with rapt approval watching her move nearer. Yes, assuredly a panther. For she was neither white nor Mongolian. Her skin was the soft, fine ivory of the Eurasian. Ivory, shading to tawny gold with the contours of her body, deepening with the curve of her thigh, the round of her elbow, the shadowy cup of her breasts. Pantherine, too, were her eyes. Triangular eyes, long-lashed and lazy, with pupils of dusty emerald.

Captain Kohrisan sprang to attention as she approached, saluted and cried introduction:

"My lords—the Lady Rakshasi!"

CHAPTER IX

"—Or Not to Be"

THE Lady Rakshasi spoke, and her voice was just what Ramey thought it would be. Throaty and mellow, ca-

ressing-low with a throbbing undertone of promise. She addressed Sugriva, and her words included all present, but there was that in her tone, her manner, the sidelong appraisal of her eyes, which made Ramey feel her welcome was for him alone.

"Greetings, Sire. My brother tells me the Children of the Gods favor us with a visit. I come to welcome them."

Red Barrett made no attempt to conceal his frank admiration. He said, "Don't mention it, baby. Boy, Ramey, I'm getting gladder we come every minute. They grow 'em terrific around these parts! First little carrot-top, here, then this Ziegfeld doll—"

The Lady Rakshasi looked confused.

"I am sorry," she apologized. "The red-haired god no doubt speaks words of great wisdom. But his humble maidservant does not understand."

"It is nothing," Ramey assured her hastily. "The red-haired god but expresses his pleasure." Aside to Barrett he whispered, "Utcay the ackscray, opeday!" and Lake O'Brien guffawed loudly.

The interview was brief. That was Sugriva's doing. Politely, but with gentle firmness, he told her, "You have done well, Lady Rakshasi. The gods are pleased with your attendance. But now you must leave, for they would rest. They have come from afar to visit their worshippers, and they are weary."

The lovely Rakshasi bowed obedience. "Yes, Sire. I hear and obey. But ere I go, my brother bids me tender unto you his humblest apology for that which transpired in this hall. He bitterly rues his hastiness. He was confused, he bids me say, and overcome with awe by the presence of gods."

"It is forgotten," said Sugriva graciously. "Go now in peace, my lady. Convey to your brother our forgiveness."

Rakshasi left, but Ramey's eyes followed her to the door. And the golden creature knew it, for just as she slipped from the chamber she turned once more, and for a fleeting instant her green eyes met Ramey's fascinated gray ones. And the look that passed between them held little of piety.

Then she was gone, and with her departure it was as if a disturbing fever had left the room. Ramey, feeling the gaze of Lake O'Brien curious upon him, felt a stab of warmth in his cheeks, and wondered just how much an ass he had made of himself. Apparently he had done a pretty fair job of it, for the one person whose eyes would not meet his was Sheila. And strangely, now that Rakshasi was gone, it was the clear, mist-blue sanity of Sheila's eyes that Ramey wanted most to look upon. He shook himself angrily and turned to Sugriva.

"SIRE, you permitted the Lady Rakshasi to believe we are gods. Why? When you know we are not."

The Venusian overlord nodded thoughtfully. "Yes, my friend, I did not disabuse her belief. But it was no useless deceit. What I did, I did for your own safety."

"Our safety, my Lord?"

"You have probably already guessed that Ravana is no more of this earth than am I. As my people come from Gaanel, that planet which you know as the morning or evening star, he and his giant underlings spring from the red desert planet of Videlia."

"Videlia?" repeated Dr. Aiken. "You mean—Mars?"

Sugriva searched his brain, nodded.

"Yes. That is its name in your language."

Lake O'Brien moaned.

"Sweet saints, 'what fools we mortals be'! And men think they are intelli-

gent. Yet here, five thousand years before our time, the civilizations of our two neighboring worlds have simultaneously developed spaceflight—"

"No. my friend. It was we, and only we, who learned the secret of spaceflight. And like fools, we gave it away."

"Gave it to the Videlians?"

"Yes. We Gaanelians are a quiet, peaceloving people. For centuries our culture has been great. Our cities dwarf anything you humans know. Our commerce, agriculture and industry are great. We want for nothing. Thus we have turned our leisure hours to the pursuit of knowledge and the refinement of art.

"Our science discovered the secret of flight amongst the stars. Our expeditions flew to all the children of the Sun; to the planets you know as Mercury, Mars, even massive Jupiter and far, frozen Pluto.

"Only on three other planets, however, did we find life. Here on Earth—crude, nomadic barbarism for the most part, with only in one or two places the rude beginnings of a social culture—on the second moon of Jupiter, and on Mars.

"The Martian, or Videlian, culture alone was in any way equal to our own. In our blind altruism we freely gave the videlian giants our great secret—" Sugriva smiled ruefully—"and now we regret it. For we have learned that the Videlians are not such lovers of peace as we. They are hard cruel people, greedy and grasping, predatory. Their space-vessels, like ours, have brought colonists to Earth. And of these interlopers, Lord Ravana is ruler. Lately it has became increasingly clear that he has not the same benevolent designs on the people of Earth that I was sent here to bring about."

"You mean he wants Earth for himself?"

"THAT is what I suspect and fear Consider. With a whole wide world of pleasant hills and valleys in which to establish himself, Ravana chose to construct his fortressed capital on an inaccessible island sixty miles off this mainland—the Isle of Lanka.

"While he has pretended friendship, visiting me here and occasionally inviting me to his island stronghold, I have heard strange rumors about his overlordship. Where as it has ever been the Gaanelian desire to achieve harmony between our race and yours, it is hinted that the humans who serve Ravana do so not as willing subjects but as—slaves! We have tried to pass on to our neighbors something of our learning and culture, exhibiting good will and friendliness. But I am told that what Ravana wants he exacts by forceful means.

"It was to investigate these rumors that I recently sent for representatives of all Earth's governments to meet here at Chitrakuta. You saw these representatives, I believe, in the altar room?"

Ramey nodded. "They didn't seem to be particularly fond of Ravana. I don't blame them much. There's a brutal streak in the guy. His first idea, when the idol spoke, was to pacify it with a human sacrifice. If we hadn't spiked that deal, I'm afraid this young lady—" He nodded toward the chestnut-haired beauty clinging close to Barrett's side—"wouldn't be with us now.

"Well, Sugriva, I'm beginning to understand the setup now. It's not so unusual. The world we left behind was being sadly muddled by a mob with pretty much the same idea as the Videlians. They want to be top-dogs or nothing. So, now that we're here, what can we do to help you out? You want us to continue playing gods while you hold your round table conferences with the boys in the back room?"

But Sugriva shook his head. "Not now, my friend. I shall explain that later. First you must have food, rest, time to collect your thoughts. Meanwhile, guard carefully the Bow. It is of vital importance. Kohrisan—" The ape-captain saluted smartly— "Show our guests to chambers where they may rest and refresh themselves."

The time-farers allowed themselves to be led away.

SO BEGAN the incredible adventure, the "strange journey" of which Johnny Grinnell, in the prescience of life's ending, had spoken.

It was Syd O'Brien's idea when, that evening, after having bathed, napped or refreshed themselves as each saw fit, they gathered again in the garden-close outside their quarters, that they should bring this episode to a close. The gloomy twin looked—if such a thing were possible—more disgruntled than ever.

"If you ask me," he said, "we ought to get going."

"Going?" repeated his brother."

"That's what I said. I don't like this business of messing around in things that happened five thousand years before we were born. It's not normal and it's not right. No good will come of it. I'm for getting back to the time cabinet and pulling out of there before something happens and we can never get back."

Sheila gasped, "And miss this marvelous opportunity to discover the truth about things men have always wondered about, argued over? Why, Syd, we haven't even begun to discover the marvels of Angkor!"

Dr. Aiken said seriously, "Yes, Sydney, Sheila is right. Fate has granted us an opportunity to solve more of the mysteries of Man's beginnings than all earth's savants have been able to uncover in two thousand years. It is more than an opportunity; it is an obligation! We cannot leave yet. Why—" His fine old eyes glowed—"this afternoon as the rest of you slept, I wandered through the courts and the temples, conversing in their ancient tongues with men whose races were vanished before the first recorded history was written! Already I have learned enough to establish an entirely new chronology of history. And I have merely skimmed the surface!"

"Just the same—" grumbled Syd.

"Just the same," snapped his brother, "you're nuts! Back in our time, these temples are probably crawling with a regiment of vengeful Japs, wondering where the hell we disappeared to. It would be suicidal to go back now. We'd better just sit tight for a week or so . . . take advantage of our opportunity, and return to our own time with a real contribution to science."

SO IT was decided. And somehow a week passed. Where fled those warm days and even more languorous nights, Ramey Winters could never afterward tell. For there was much to be seen and done, and once the weird comprehension of their actually *being* here established itself in his mind, Ramey, like all the others, dipped eagerly into the garnering of new knowledge.

With the Lord Sugriva they spent many hours. Even feeling sure, as they did, that everything the blue lord of Angkor told them was true, some of his statements were so fantastic as to be almost incredible. As when Dr. Aiken queried him on the extent of Gaanelian colonization.

"I do not know, exactly," admitted Sugriva. "But there must be five, six, perhaps more colonies. One of my compatriots, I know, governs an out-

post south and west of here. A desolate territory bordered on the north by vast desertland. Another bears the light of culture to jungle natives on a far continent, a hemisphere removed. Still a third has established himself on a tiny island to the west, where the mighty sea begins."

"Lower Egypt!" cried Dr. Aiken raptly. "Its culture, differing sharply from that of the Upper Kingdom, has always puzzled archeologists. The lost Merouvian civilization which left great paved roads and cities where now is Peru. And a tiny island—?"

"*England!*" cried Sheila. "Daddy, that explains why the legend of the 'blue gods' persists in ancient Anglo-Saxon history. The Druids worshipped 'men from the skies.' They had their 'sky-blue heaven' of Tir-n'a-nog. And as late as 1,000 A.D. the Picts went forth to battle with their bodies painted with blue pigment!"

But again, as before, arose the question: if these colonies now existed, into what darkness had they disappeared that those of the Twentieth Century knew them only as legend? This was a cause of great sadness to Sugriva.

"I can only confess," he conceded regretfully, "that somehow our mission, the bringing of culture to your less enlightened Earth races, must have failed. Why, I do not know."

HERE a great thought struck Ramey Winters.

"But if we could only find out what destroyed your attempt, perhaps we could do something to prevent it!" His eyes glowed. "What a glorious thing for mankind! Already you have converted men from nomadic wanderers into a semi-cultured people. If that cause which destroyed—or is to destroy—your tutorship were to be removed—" Ramey faltered over the use of tense, feeling kee
of their position as men
living in a past, being par
yet knowing inerrarably tha
to come— "Why, then, the
tory of mankind could be
There would be no decay in
culture, no Rome rising might
toppling, no long Dark Ages.
would be only steady progress, ev
ward, upward, to greater knowled

Syd sniffed, "You're day-dream
Ramey. The fact that we exist prov
that the history of mankind took a certain channel. There's no way of changing that. Is there, Doctor?"

"I don't know, Sydney. There is much to be said on either side. It may be that history is, as you say, unchangeable. But there is the problem of casuality. Once this era *was*. We, having not been born then, were not here. Causes developed effects new causes—and a course of history was written leading to the world we know.

"But a new factor enters an old equation. This era again *is*, but we who do not properly belong here have entered into the picture by way of a time-machine. It is conceivable that our very *being here* is sufficient of a cause to change and divert the entire sequence of events which would otherwise have been the 'future.'"

"Rot!" snorted Syd. "Excuse me, Doctor, but that's not logical. For if our being here were to change history in any slightest way—then we would automatically cease to exist! Because the exact and precarious chain of circumstances which brought us into being would have been altered."

CHAPTER X

Exposure

SO THEY dropped the matter there, completely unable to solve the prob-

nced that his theory was without a lingering doubt other's might be true. And ed by.

re fruitful days. Lake, who ir for the philological, spent e studying the Gaanelian lan- To Red and Ramey, as pro- al airmen, what was of particular st was the matter of spaceflight. elian ships, Sugriva told them, ed regularly at every inferior con- junction of Earth and Venus, Videlian craft less frequently. "But often enough," the blue lord admitted ruefully.

"And these ships—" demanded Ramey eagerly. "Their method of propulsion? What is it?"

Sugriva frowned. "I am not sure I can tell you, my friend. I have searched my brain for the words in your tongue with which to explain—but they do not exist. It is a concept utterly foreign to your culture. The nearest I can come to an explanation is to say there are 'fields of force' between the planets, and on these fields the ships feed and ride."

"An electrical transmission of some sort, perhaps?"

But again the protector of Chitrakuta looked baffled. "Now there is a word in your tongue," he apologized, "which is foreign to *me*. A concept of your civilization *I* cannot grasp."

And Ramey realized suddenly that despite its many magnificent scientific achievements, the Gaanelian race was apparently in total ignorance of electricity! It was used nowhere; not for heating, lighting, communication. He tried to explain the phenomenon to Sugriva, but it was a hopeless task.

"I am sorry, Ramey. But that is a study in which I am not adept. If you will but wait until the next spacecraft arrives, a matter of but a few months, there will be those on board with whom you can talk more understandingly."

And with this Ramey had to be content.

But if the blue lord's knowledge of mechanical science was deficient, he lacked few other qualifications of leadership. During the stay of the time-exiles was held the grand parlay for which representatives had been summoned from every corner of the civilized eastern world.

SUGRIVA proved superbly his right to rule. To the gratification of the assembled humans and the disgruntlement of the Lord Ravana he laid down the Law. That there should be at all times peace and amity between the natives of Earth and their foreign visitors. That Earthmen should feel always free to call upon those of Venus for information and aid in new projects. That the chosen of Earth's youth should gather annually in the nearest Gaanelian colony for instruction in knowledge and culture. That Gaanelians and Videlians should at all times respect the territorial rights of Earth's races, and should at no time make any demands upon persons or services of terrestrial subjects for which the Earthmen did not receive complete and satisfactory compensation.

There had to be teeth in this pronouncement. Sugriva bared them plainly, for the second time exhibiting the sternness which underlay his placid nature when he thundered determination to make all abide by this covenant, under pain of the displeasure and (if need be) the armed reprisal of the Gaanelian overlord. He did not hint what nature these sanctions might assume except to Ramey Winters, and then on only one occasion.

"Guard well the Bow of Rudra, Ramey Winters. The day may yet dawn when we will have need of it."

Ramey said, "But what is it supposed to do, Sire? I have experimented with it, hut nothing seems to happen when I finger the grips. It's a pretty useless hunk of ordnance, if you ask me."

Sugriva said, "I am quite content that you do not now how to operate the Bow, my son. It is too dreadful a weapon to he lightly exploited. But if the time ever should come for its use—"

So the pact was drawn up, and the several races became signatories. It was a direct and cballenging hlow to the amhitions of the Lord Ravanna, one that he swallowed with difficulty. But swallow it he did—though perhaps one of the greatest contributing factors to his signing was the fact that at the final meeting were ranged beside Sugriva the time-exiles—and that in Ramey's ready hand dangled nonchalantly the dreaded Bow of Rudra.

BUT the days at Chitrakuta, for such by now they had all learned to be the Gaanelian name for the temple they had known as Angkor Vat, were not all concerned with study or the grim business of government. There were hours of relaxation, too.

Red Barrett, for one, was thoroughly enjoying the championship of the heautiful damsel wbo bad heen placed in his care days before. Of course she proved a baffling bundle of loveliness in some respects. As on the first day, when Ramey chanced upon the duo in time to hear Red demanding perplexedly, "How? How's that? Come again, Toots!"

And: "Ich higbt Evavne ab Daffydd y Marwnadd, mihr gneight," repeated his lovely charge demurely.

Red moaned. "Hey, Doc!" he yelled, "Hey, Sheila! Anyhody got any spirits of ammonia with them? Toots, here, has the hiccups!"

Ramey went to his chum's aid. "What's wrong, Red?"

"It's Toots, here," complained Red aggrievedly. "I said to her, 'Look, Toots, I can't keep calling you "Toots" all the time. What's your real name?' So instead of giving me a straigbt answer, she makes with the douhle talk."

Dr. Aiken, who had been listening with amusement, now spoke up. "But the young lady *did* answer you, Barrett. She said she was 'Evavne, daughter of David and Marian.' And—" The old man smiled slyly—"I believe you've made something of an impression, my boy. She called you her—er—'knight'!"

"Yeah?" grinned Barrett. "Well, gee! Tbat's okay, ain't it? Evavne, huh? Not a had handle, Toots. But after this, you better talk English."

"She *is* talking English, Red."

"Huh? Aw, now, Doc—"

"Well, let us say, then, she is speaking the ancient tongue from whicb modern English derives. I fancy—" said Dr. Aiken speculatively — "our charming friend is a daughter of one of those races which first settled the British Isles. A Pict, or a Celt."

"All I got to say," grumhled Red, "is that going in the *vilyishna* with us didn't do much good if that's the best English she can talk. Come on, Toots. You and me is going to see Sugriva and bave bim arrange another language-exchange in the recording booth."

And together they left on tbe expedition wbicb was to remove their last lingual difficulty. They had no other kind.

RAMEY WINTERS, too, was finding the soft, moonhright nights of Chitrakuta conducive to thoughts far removed from the grim ones of batred, war and death that had governed his life until his translation into this elder world.

In Sheila Aiken he had found a woman who, after all these years of avowed misanthropy, had the power of arousing within him strange sensations. New sensations to Ramey Winters, perhaps, but sensations which any wise men could have told him were as old as humankind.

There was about her a *something*—a peace, a quietude, a gentleness—which filled a vital need in his makeup, which calmed and complemented the flamelike restlessness of his own nature. With propinquity came greater admiration for Sheila Aiken. And as the days and nights, especially the nights, threw them into ever increasingly intimate contact, admiration deepened into something Ramey thought, believed, feared he could name—but dared not.

Vainly he reminded himself that he was a fighting man, a soldier. That all this madness was a strange interlude out of which sooner or later he must return to take his ordained place in the world he had left. That he must neither pledge himself nor demand pledges of one whose world was so far removed from his own.

But these decisions were more easily made than kept. And if, strolling at her side in the moonlight, Ramey never actually swept Sheila into his arms as he wished and knew he could, if he never actually spoke the words that with increasing frequency trembled on his lips, perhaps it was not necessary after all. For Sheila Aiken, though she had spent her twenty years living with men in wild, mannish places, was still inherently a woman. And she understood these things, and gloried in them.

And the days and the nights were sweet, and Chitrakuta was an Eden. But even Eden had its serpent. . . .

RAKSHASI had almost slipped from Ramey's memory. A week or more had passed since he had met her in the council hall of Sugriva when late one night there came to him a Videlian warrior bearing the message that the Lady Rakshasi awaited him in her apartment. He was urged to come, pleaded the messenger. A matter of grave importance.

Wondering, Ramey followed the man through darkened corridors to that section of the imperial city which housed the Videlian visitors.

If it were business the Lady Rakshasi wished to discuss, the manner of her approach to the subject would have been a revelation to the financial tycoons of Ramey's day. For when he entered her apartment it was to find a small chamber, intimately draped, warmly scented with the breath of perfume, and exotically furnished with a tumbed pile of silks and furs upon which gracefully reclined the golden woman of Mars.

In that room, enticingly dark save for small wicks guttering in corner niches, the Lady Rakshasi was more than ever the sleek, slumbrous cat of the jungles. The dusty emerald of her eyes lighted with invitation as he entered. She purred a word of command and the servant vanished. She and Ramey were alone.

"My Lord is gracious," she whispered in her husky voice, "to answer thus the plea of his humble servant." She touched the soft pillows beside her invitingly. "Would my Lord tarry and rest?"

He was, an inner consciousness warned Ramey, playing with fire. But an instinct stronger than reason lowered him beside her. This woman had something! The Hollywood of the world he had left behind would call it "oomph." More strictly rhetorical admirers would call it charm, fascination, allure. But he would have been a poor

man indeed who could go without learning what the Lady Rakshasi wanted.

"Yes, my Lady?" asked Ramey. "What would you of me?"

THE Lady Rakshasi turned slowly on one elhow, studied him long and lazily before answering. When she spoke her tone was servile still, but there was a question in her voice, and the suspicion of a challenge in her curious, heavy-lidded eyes.

"I called thee, my Lord," she replied, "to warn thee of an evil rumor which has of late gathered boldness in the temples. Believe truly that thy servant means no ill, nor douhts thy glory. But there are those who whisper that thou and they companions are not gods at all—hut only men! Some strangely say, men of another day."

"But, of course—" hegan Ramey. Then stopped, remembering the necessary deceit by which Sugriva hoped to maintain peace in the colony. He finished lamely—"But of course they jest! Surely all saw us come from the heart of the holy image?"

Rakshasi smiled. "Aye, even so, my Lord. Thus told I them. But there be ever those who doubt. And they murmur that oftimes the actions of thy companions are strangely ungodlike. They eat, they sleep like mortals. From place to place they transport themselves on foot rather than hy instantaneous translation, as all men know is the way of gods. And many are the questions they ask, when all know the gods are omniscient."

It was not, Ramey had to concede ruefully, not just a chink in the armor. It was a gaping hole, big enough to drive a Mack truck through. He and his friends *were* touring around Chitarkuta like a bevy of wide-eyed schoolkids, and certainly putting on one hell of an unecclesiastical show!

"When the gods walk amongst men," he told her firmly, "they conduct themselves in the fashion of their worshippers. It is no man's right to question these things."

"Aye, my Lord!" This time Rakshasi's agreement was more swift. He had, Ramey thought, pulled a successful sandy. "So told I them, yea, and even my brother Ravana which lent an ear to their impious murmurings. These are in truth the gods, spake I, come to mete justice and right to their children. Still—" Here her voice took on a plaintive, querulous tone—"Still cannot we of Videlia understand why the gods should show favor to the blue lord of Gaanelia, when it is *our* people which have ever been their most ardent followers. All know that the hlue ones of Gaanelia are a cynical, impious race. Theirs is a culture of agnostic science. Many, indeed, have declared there are no gods at all, but only primal causes—"

"Hold, my Lady!" interrupted Ramey. "The protector Sugriva is a good man—"

A NOTE of passionate rebellion throbbed in the golden one's voice. "A good man, aye!" she cried witheringly. "In his feehle way! But they are a decadent, dying race, the Gaanelians! Where as we of Videlia—" A tenseness gripped her figure, and the shadowy amber of her hreast rose and fell with her emotion—"are a great and growing race, young and strong. As the gods," she cried challengingly, "have much to offer men, so have their followers much to offer the gods! Allegiance and devotion, aye, and sacrifice!

"Speak you, Lord Ramey—were it not to the gods' own benefit that they should cast down these weaklings of Gaanelia, and raise to the heights those who are their own true believers?"

Her meaning was clear. Ramey stared at her with sudden sharp intentness, a warning bell chiming in his ears. Here was open proof of the faithlessness Sugriva had feared. A plea for divine approval of Videlian ambitions. It was a good thing he had come here tonight. He must nip this movement in the bud.

"The gods, my Lady Rakshasi," he said sternly, "desire naught but peace. They will neither sponsor nor permit the elevation of one race over another. All must live in amity."

The golden amazon's excitement died. Her voice lost its challenging note and became softer, throatier, more insinuating. She stirred nearer him, and the silk rustled languid invitation. The warmth of her body touched his own, hip and thigh, and the scent of her hair was a titillation to his nostrils.

"But, say, my Lord," she whispered, "do not even the gods look with favor upon those who please them?"

The warning bell was clamoring brassily now. It rose and fell with the pound of Ramey's pulse. His temples hammered, his lips were parched, and forgotten now were Sugriva and Dr. Aiken, Red, the O'Briens, all those who had accompanied him into this strange adventure.

Even the mist-blue eyes of Sheila Aiken were a far memory, colorless and without warmth.

He choked, "It is . . . true . . . that even a god might look with longing upon . . . one like you, Lady Rakshasi."

And she was closer still, the warmth of her tempting-near, her sleek, golden body yielding to his own, her breath upon his lips.

"THOU and I, if I delight thee, my Lord," she whispered. "Together might we raise Videlia into the power and glory which is rightly its own. With thy mighty arm, and with the strong Bow of Rudra, we will sweep all others before us. Nor shall we stand alone. For, lo—there is even my brother Ravana, whose heart sickens with hunger for the goddess Sheilacita who is in thy train."

Now the warning bell, which had become a faint tolling whisper almost submerged beneath the waves that engulfed Ramey Winters, burst suddenly into full, reverberant cry! With one shrugging movement he had thrust the tawny temptress from him and was on his feet.

"What!" he cried. "Ravana—and Sheila? You mean he *dares*—" His blow flamed with a sudden, red rage; anger that was darker still with the realization of the trap into which he had almost let his senses betray him. "No, Rakshasi! That cannot be! Sheila belongs to *me!* No other man—"

Then he stopped. For the Lady Rakshasi, too, was on her feet, panting and furious. The dusty emerald of her eyes was now the cold, burning green of glacial ice. Even in her outrage, her quick mind grasped the implication of his words.

"No other *man,* my Lord? Then they were right! Thou are no god, but only a pretender! And Sugriva has lied. Well, he shall pay for his deceit. And you, too, poor mortal thing who prefers a pallid shadow to Rakshasi, you, too, shall regret this night. *Go!*"

She pointed a rage-trembling finger to the door. With a sick helplessness Ramey realized he had spoiled everything. To stay here now, to argue with this unreasoning amazon, would only make matters worse. He left.

IN THE late morning he woke from a tortured slumber to find Red Barrett leaning over him, shaking him. The brick-top was grinning mockingly.

"Boy, you sure were knocking 'em off. Know what time it is? Almost ten. Stir your stumps, keed; we got stuff and things to do today. Golly, your eyes look like a pair of frayed button-holes! If we was back in our own, honest-to-gosh time, I'd say you was out on a bender last night."

Ramey said drowsily, "Not a bad idea at that. When we do get back to our own time, which I hope will be soon, we'll have to give it a try, Red. A good one."

"Here's your pants," said Red. "Got good news this morning, anyhow. Know what happened during the night? That big, overgrown hunk of yellow nastiness and his gang pulled up stakes and scrammed out of here. I'm sure glad to see the last of him, ain't you? Though I got to admit that sister of his was a snappy looking—what's the matter, Ramey?"

Ramey, fully conscious now, was pawing anxiously through the tumbled silks and furs that were his bed. "Where is it?" he demanded. "Have you seen it?"

"Seen what?"

"The Bow!" rasped Ramey. "Rudra's weapon! It was here last night. Now I can't find it anywhere. And—" His eyes suddenly widened—"Ravana left Chitrakuta! Damnation! If he—Come on!"

With the now equally alarmed Red at his heels, Ramey dashed from the chamber. He hadn't far to go. He found the others—Dr. Aiken, both O'Briens, Sheng-ti, Sugriva—in the central court on which his room abutted. They were gathered in a tight knot; as one man they turned at his cry.

"Sugriva!" he called, "Order out the troops! There's trouble afoot. Red says Ravana left last night—and the Bow of Rudra is gone with him! Well, don't just stand there like that, staring at me! *Do* something!"

But it was Dr. Aiken who answered. There were white lines about the old man's lips that Ramey had never seen there before. His eyes were bard and worried. "The Bow!" he cried. "The Bow, too, Ramey? You hear that, Sugriva—?"

Despair seemed to settle like a black cloud over the Gaanelian's eyes; his shoulders sagged, and his voice was ominous. "I hear, indeed! And now is our plight truly perilous. For if they have the Bow, too—"

"What's this all about?" roared Ramey. "What do you mean, 'the Bow, *too*'? What else is missing?"

Syd O'Brien stared at him morbidly.

"We don't know how they did it, Ramey," he said, "or why. But when Ravana and his gang pulled out of here before dawn, they not only took with them the Bow of Rudra. They also—kidnaped Sheila!"

(To Be Concluded Next Month)

What will happen to Sheila Aiken? Where has Ravana taken her? What is the secret power of the mysterious Bow of Rudra? What is in the mind of the lovely, dangerously fascinating Rakshasi? What will be the outcome of the clash between the rival Martian and Venusian factions in this ancient city of Angkor? Will Ramey and Sid O'Brien be able to combat the menace that is closing so swiftly around them? What is the secret of the Blue People?

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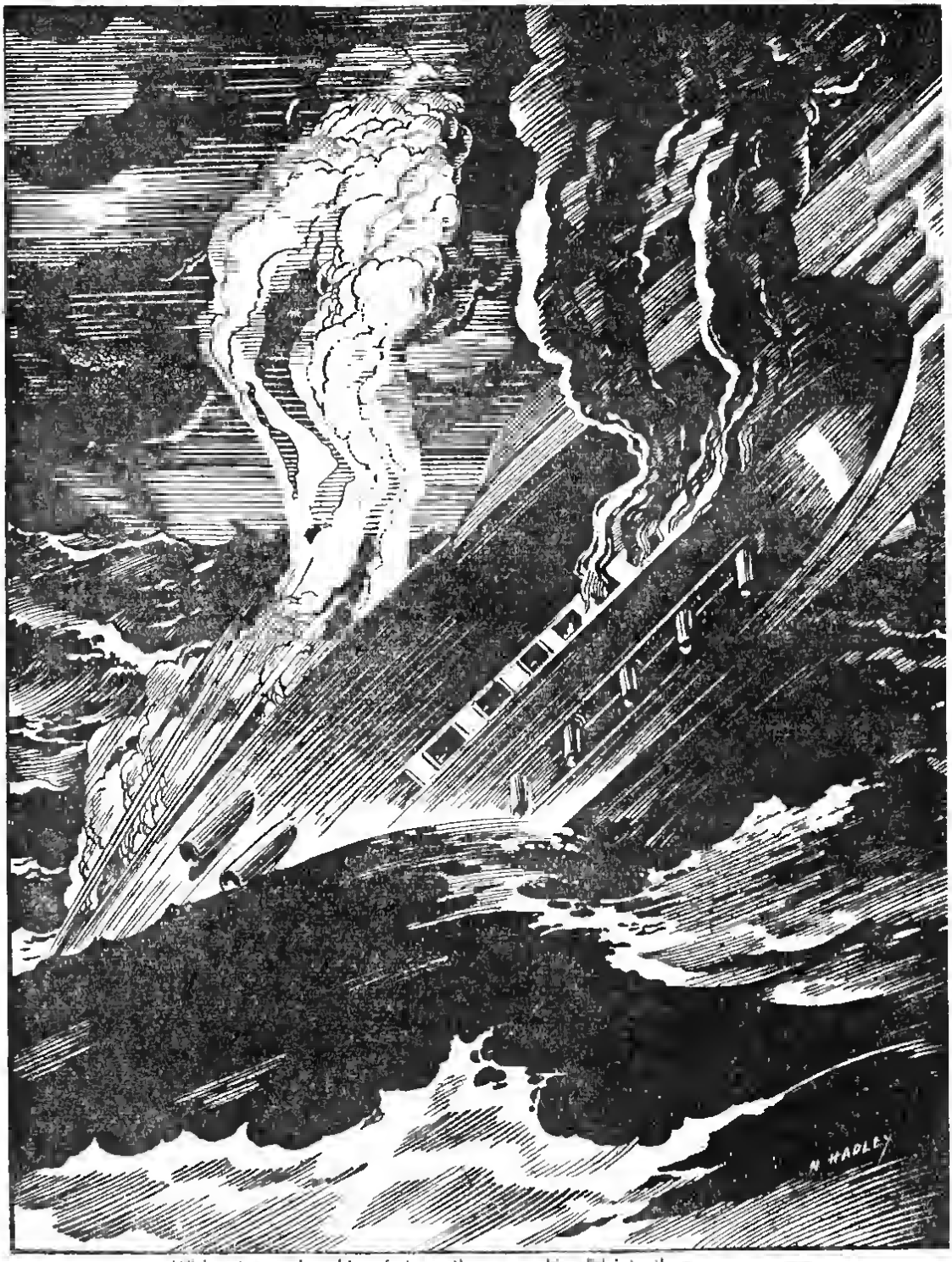
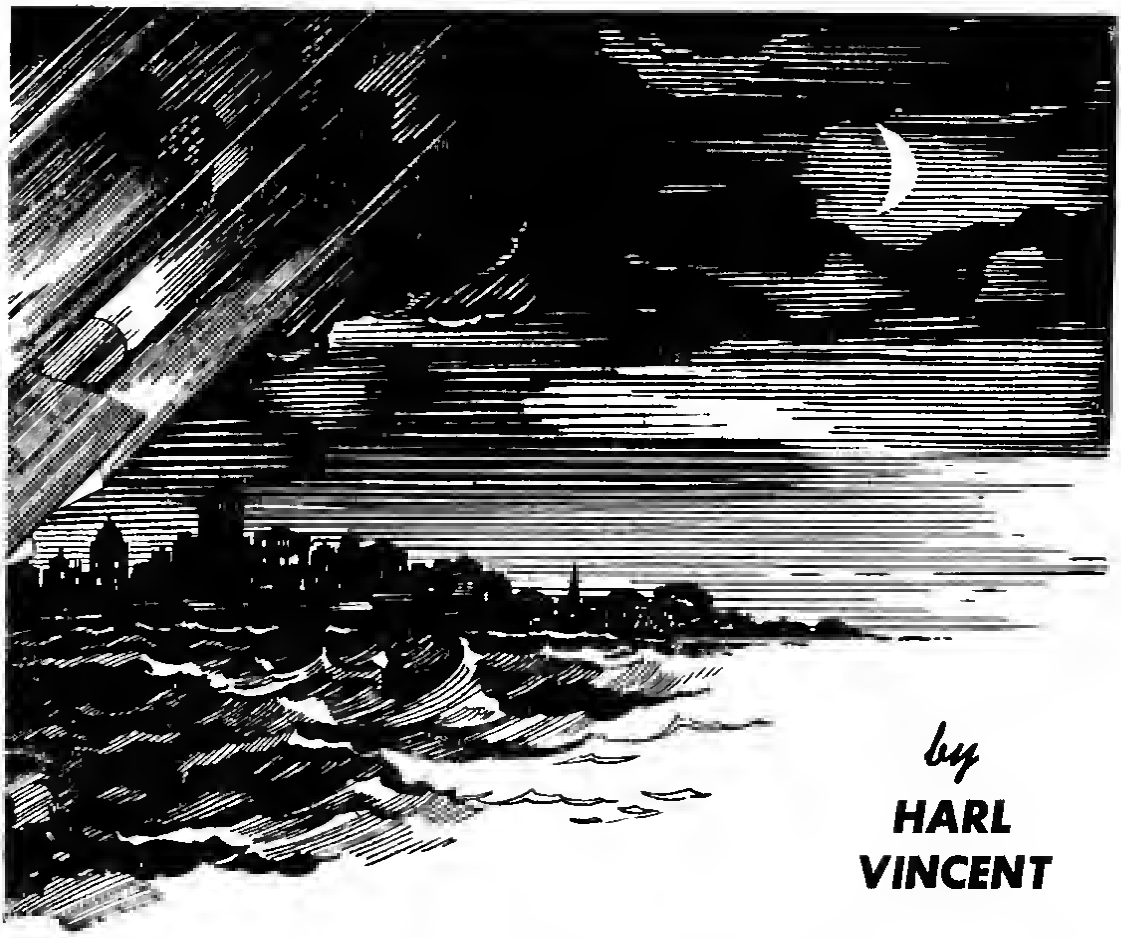
VOICE FROM



With a tremendous hiss of steam the space ship slid into the sea

THE VOID



by
HARL VINCENT

Deadly ships from Venus were on their trail, and Wally Martin mooned over a girl's voice!

"DID you hear that?" Wally Martin asked me, goofy-like.

"Hear what?" I replied, keeping an eye on the vision screen full of pursuit jobs in our wake. "Your report?"

"No," Wally sort of yodeled. "*Her* voice. Ever hear anything like it? Every word a song—"

It must be I was staring at him with my jaw hanging or something because Wally broke off and looked kind of sheepish.

"Voice!" I yammered. "You're thinking about a voice when the whole of space is full of Venies after our scalps. Whose voice?"

"Hers. The operator's," mooned Wally.

It seemed then I could recall the rich throaty tones of it and the almost caressing way it had come through the

sound grid. No vision flash, of course; central operators weren't allowed to put their mugs on the vision wave. But to go daffy over a voice!

"Wally," I said, severe like, "you must be going nuts, which is no wonder after knocking off a couple of hundred Venies and a billion in war supplies. With all the swell femmes you've turned down, to go and fall for a voice. The laughing academy for you, buddy."

But Wally only stared into space with that half smile around his lips and said nothing. I could see he was hit hard.

For me to tell you Wally Martin was a lady-killer would be giving you a wrong slant. What I mean is he never went for that stuff at all, whether in the big hurgs of Terra where they sort of stood around and hugged longing eyes at him or in the pleasure cities of Mars where even the top-notch hostesses went for him in a big way, giving it up as a bad joh only after desperate use of their hest glamor tactics. It was just that Wally was that kind of a big he-man good-looker they all fell for. But he wouldn't give any of them a tumble.

And me, with my honest but ugly pan, itching all the time for just one of the classy dames to hand me as much as a how-do-you-do. That's the way it is with me and the other way with Wally.

Which made it all the tougher, what finally happened to him. Wally had to learn the hard way.

It was after the two of us had raided the Venusian hase at Lin-Tarig and had their whole damn space navy on our tail. I was shoving our little atomic blaster toward her Terra base with everything she had when Wally made the etherphone call to G.H.Q. To report what we'd done, of course. And this voice was from a central operator who got the connection through for him.

WALLY'S smile faded when our thinly screened hlaster shivered to a heavy jolt. One of the Venies had gotten a shot through. So I locked the controls in automatic with five gravities acceleration and the two of us lurched astern, hanging onto everything in sight.

The alarm board showed that one of our spare atmosphere units had been put out of commission and its compartment sealed off. So far not bad. Wally and I climbed up to the stern gun turret in a rush.

Two of the swifter Venies were back there, just within range, and were blasting away at us wildly.

"Let me at those sights," growled Wally. "This is my meat."

It was his meat; he was a much better shot than I. So I let him take it, though itching to have a flyer at those birds myself. Meanwhile, I remote-controlled the spare generator and brought it up to speed, switching the extra power into our stern screens. The Venie's blasts were splattering harmlessly against the unseen harrier after that, hright flashes against the black of the void.

Wally grunted when he let fly with his fist. Then: "A hit, Eustace!" he whooped.

Yes, my name's Eustace. Eustace Cunningham, which doesn't fit my fighting pan at all. But, could I help what they tagged me? Anyway, Wally was right; it was a hit. One of the Venies splashed out into a heautiful sunburst of light and then was gone. The other started a wide arc in space, whether to take a new firing position or to try and get away I'll never tell you. Whatever its pilot's idea, he was goofy and didn't know anything about Wally's marksmanship. Because the sec-

ond blast caught him amidships and he just went "poof" like the first one. The rest of the Venies were too far astern to worry about, so we went back to the control room.

"That means I'll have to report again to G.H.Q.," gloated Wally, diving for the etherphone.

He couldn't kid me of course; I knew why he was so anxious to call. And it was kind of sad, seeing him this way, nuts about a voice. But this was only the beginning! I didn't know anything yet.

SURE enough, the same dame answered his flicker. And she did have a voice you'd remember, sort of cooing-like and cultured like a top-notch actress. I listened close this time and got a kick out of it myself. Even before she sprung the surprise.

"Congratulations," were her first words on plugging in, "on the way you took over those enemy ships."

That gave Wally a jolt. Me too.

"Why—why," he stammered, "how did you know about it?"

You could almost hear that gal blushing. "I had a spy beam on you," she admitted. "I saw the battle."

"Well, fry my hide," said Wally. "So your supervisor wasn't around. And, if that's so, what do you say you give me a vision flash of yourself?"

"No, no; I couldn't do that. Really I couldn't." The voice from the void was obviously agitated. "You know it's a strict rule always, especially since the war."

"So are the spy beams forbidden to you," countered Wally.

"Uh—well, that's different." The voice seemed panicky to me but I could tell by the calf eyes my buddy was making that he still thought it was the swellest voice he'd ever heard.

"Maybe you'll tell me your name then," he volunteered. "Mine's Wally Martin."

"Oh I know your name." That voice blushed again, sure as I'm a space wrangler. "Mine is Elsa Vaughn. There, now I've told you. It is G.H.Q. you wanted again?"

"Yes but wait; I want to talk to you," jabbered Wally.

"Can't do it—Wally. I—" To me, that rich voice was once more panicky. The girl seemed sorry she'd told him what she had. Scared of something, that dame. "Here's your connection."

Old Tompkins's fat jowls faded into the vision screen then and Wally started to sputter out his report to the top hat at G.H.Q.

"Get yourself together and start all over," the old boy told him after a few cockeyed words.

And then Wally got hold of himself and told about the dog fight we'd just had. After old Tompkins gave us the "good boys" line and clicked off, this loony pal of mine tried for a half an hour to raise that voice again. Finally he did get the supervisor at the Terra Central and was told to keep off the ether if he had no G.H.Q. calls to make. Regulations, she said primly. And of course the love-sick galoot didn't have nerve to ask where was Elsa Vaughn. He'd have been a genuine crackpot if he had.

"Damn!" he swore feelingly and went off grumpily to his bunk.

WE'D been ordered in to Terra base, which was at a Long Island port I can't tell you about, and Wally had the jim-jams all the way in. It was three days run from that last dog-fight and wasn't a damn bit funny to me. The guy would hardly talk and when he did you couldn't help but know he was somewhere else with his thoughts. Where?—I'll give you three guesses.

Finally the indicators warned us we were getting close to the Heaviside Layer and I plugged in the search ray swarm on the radio telescope and took a look-see ahead. After a while I spotted, hig as life, four Venie hlasters streaking in from God knows where.

"Hey, Wally!" I yelped, "take a gander at this."

He eyed the disc and it looked as if he'd forgotten her voice, at least for the time. "At 'em, Yoost!" he whooped and was up the companionway for the forward gun turret.

Yoost—how do you like that? This moniker of mine is one you can't even nickname decently.

Anyway, I gave our ship the gun and went driving for those four Venies, knowing my huddy was handling the persuader up top. But the sly Venies split up into two pairs, one pair coming in to meet us and the other pair circling to take us from the stern.

Wally's voice bellowed out of the intercom speaker: "Put her in automatic, full acceleration and get up there to the aft turret. And don't miss, fellow."

So I did what he said and scrammed, muttering some kind of a prayer that I'd be ahle to see those sights and keep my hands from shaking. This was it!

Those devils were really after us this time, what I mean. I switched all the reserve power we had into the screens and threw them out as far fore and aft as I dared. And then those two were closing in to get the range on our stern. I couldn't see what my pal was doing in the forward turret hut knew I could depend on him to get his two. How about me?

My first blast missed a mile and a big splash tore through the screen out there and almost reached me where I sat. Or did I sit? I guess I was jumping around in that little cuhby like a monkey.

The Venies poured their stuff in after me then and I was sending it back at them just as fast as I could. But their screens and ours were holding out pretty well at this range and they couldn't seem to gain enough on us to get in closer. So neither side could score.

"Got one of mine!" Wally yelped through the intercom. "How're you doing, Cunning?"

Another of those nicknames that give me a pain. I told him I wasn't doing so good hut it wasn't my fault.

And just then one of those damn Venies put on a hurst of speed and plunked us so hard it knocked me off the gun seat. There was a keening wail below as a generator let loose and then the clatter of a million pieces smacking the steel bulkheads. The panel light for number seven spare hlinked out and the Venies began to get through plenty as the stern screens weakened. The generator compartment held, though, and the Venies were missing in their excitement.

"Give it to 'em!" screeched Wally. "Quick; we're near the Heaviside."

I'D FORGOTTEN ahout that. You never know what that queer layer of pounding electrical forces is going to do to you when you dive through. The pinch we were in must have steadied my eye and my mitt, hecause my next shot hlew the nearer Venie to kingdom come.

So it was my turn to whoop. "Got one, Wally!"

"Attaboy!"

Then we began to roll and go jittery like a guy with the horrors coming on. You couldn't hit a flock of harns with the hlasters. I scramhled down to the control room and nosed into the layer at the proper angle.

And Wally corked off his second Venie just as I got the ship straightened away. He came roaring through the control room toward the stern gun.

"Hold her as steady as you can," he told me.

Just like that. Well, if you think it's easy just try it once yourself. We took one corking beating for the next few minutes and I had all I could do to keep us in one piece, let alone bolding to a steady course.

But Wally got the last Venie while we were still in the grip of old Heaviside, so we were all right. Or were we?

The alarm panel was ringing all over the place and I couldn't count the red lights that blinked on. One of our bulkheads had sprung a leak for one thing. Half our air apparatus had conked off for another. And our keel rocket ignition was completely haywire. How the hell to land?

"Some fun," commented Wally, coming in and regarding the alarm panel with his fists on his hips. "Some fun."

GRAVITY was tugging like the devil and I flattened off and took a swooping spiral around Terra, decelerating full five gravities which was all we could stand. Wally went below to see wbat he could do with the ignition down there.

When I sighted Long Island we were still doing a couple thousand miles an hour, so I circled way out to sea with the nose rockets still roaring full blast. I called frantically for a couple of rescue tugs to bring us in and, as I crossed the island again, saw a swarm of them coming up. But we weren't down to anything like landing speed yet and were losing altitude rapidly. Those tug wranglers simply couldn't catch up with us.

So we crasbed about five miles from Base and that's tbe last I remembered till I woke up in the hospital.

"How's Wally?" I asked the nurse who had soft fingers on my pulse and was looking at ber wrist watch.

After the time was up she wrote a figure on a chart and said brightly, "Well, you are all right outside of a goose egg on that tbick skull of yours. I'll find out about your buddy. And you can get up if you're not too dizzy." She skittered out then.

You can't kill an old wrangler like me. I got out of that nice white bed and I was a little rocky on my pins. But I made it to the closet and all that was hanging there was a frilly bath robe. They had my clothes in the fumigator, I guess. Anyway, I put on the silly robe and sat around waiting for the nurse.

It got me nervous after a while and I was just going to take a stroll for myself whether they liked it or not when in breezed old Tompkins, from G.H.Q., and a doctor who looked more like an undertaker.

"You all right, Cunningham?" the top hat asked.

"Sure, I'm okay. But how's Wally?"

Tompkins looked grave and the doc dropped bis eyes. "He's in bad shape, my boy," said the top hat. "One of the landing rockets exploded right in bis face and he was badly hurned. Beside broken bones mostly all over his body. But we *hope* he'll recover."

This was one for the book. I sat down hard on the steel chair to think this over. They couldn't do this to Wally, not to my pal.

"How good are his chances, Doc?" I asked. "Honestly now."

"I'd say about one in five," was the solemn answer.

"Holy Mackerel! Can I do anything? A transfusion or anything?" It just wasn't right that I was sitting here ahout as good as new and Wally was—like that.

"No, there's nothing you can do," said the long-faced doc.

"Well, can I see him?"

"He's still unconscious and he's all wrapped up in bandages, so it would do you no good. Better get along home and come back here tomorrow. We may be able to let you see him then."

Old Tompkins gave me ten days furlough and told me there was a bonus waiting for me at Base. But what good was that with Wally in this shape?

They went out and the nurse came in and handed me my clothes. I must have put them on, though I don't remember doing it, because there I was dressed pretty soon. So I wandered out in the hall and got checked out by another pretty who sat in white starched uniform at a desk.

"There was a phone call for you," said this little de-icer.

"A phone call!" Who'd be calling me?

"It was a Miss Vaughn," the nurse was explaining. "She tried to get Wallace Martin first and then left her number for you to call when I told her he couldn't be communicated with."

"Thanks, Baby," I told the nurse and she gave me a dirty look that sent me off to the corner drug store fast.

So I called up Elsa Vaughn.

"HELLO," came that swell voice over the wire. I say it was swell and it was, but I could just feel the fear it carried. "Oh, Mr. Cunningham, I know you'll tell me the truth. You can't find out anything from the hospital. How is Wal—Mr. Martin?"

"Why, they didn't tell me so very much either," I told her, "but it's got me sort of worried. He was burned badly for one thing and has a lot of broken bones too. He won't be up and around for a while."

I didn't want to tell the poor kid how bad I really thought he was and how black the sawbones had painted it.

"Oh dear," wailed the voice, "I wish I could do something. I'm all upset and just have to talk to somebody. I—"

"Can't I come and see you?" I asked her, curious to know if she was as beautiful as her voice. And maybe she wouldn't think I was so bad myself; you never can tell about these operators.

"No—oh, no." The voice was panicky once more. "No, I can't see anybody."

"Say," I objected, "what's wrong? I'm Wally's pal and I know from what happened that you're interested in him. And I'll tell you right now he's nuts about you without ever seeing you. Why should I want to get fresh?"

"It—it isn't that." The voice trailed off and was silent for a minute. Then: "All right. I might as well see you. Then you'll know. And you'll know why I never can see Wally; why he'll have to forget me when he's well again."

How do you like that? The whole thing looked screwy to me. This dame wasn't on the up and up or something. Maybe she was a married gal already.

She was giving me her address and I had a job writing it down on an old envelope in the dark booth. But I told her I'd be right over, so I went away from there.

The antigrav cab I grabbed whirled me the length of the island and into Queens in nothing flat, planting me right on the landing roof of a good class apartment building. I didn't have much of a time finding 36-T, which was her apartment.

And did I get a jolt when a slim little femme with a thick black veil over her puss met me at the door.

"Miss Vaughn?" I asked, as calm as possible with the mourning effect staring at me.

"Yes; come in, Mr. Cunningham," said the golden voice from back of the veil.

It made me feel spooky. In a kind of

a daze, I followed her as she indicated one of those low down deep arm chairs into which I plunked thinking I'd never be able to get out of it. She sat down across from me, still with that black thing hiding her.

"Why the make-up?" I asked to start the ball rolling.

"This is the way I always have to appear in puhlic and this is why I can never see or know Wally Martin," she said sadly. Then she swept the veil and said, "Look at me."

I looked. And, if I never leave ground again, she bore the slave mark of Mercury! The lower half of her face was as green as that stuff they call grass that grows between the cities.

TEARS tremhled on the longest lashes I ever saw on the swellest big blue eyes in the world. The gal's features were perfect, her figure was perfect, and she'd have been a dream if it weren't for that damn mark of the tyrant of the inner planet.

She threw her head back proudly. "It's the mark of disgrace and it's there to stay, but I'm not—I wasn't—"

"I believe you," I said. "Forget it."

"I'll not forget it; I can't," she retorted. "I was captured and I was marked for his slave harem. But I escaped and finally got to a rescue ship without—"

"Forget it," I said. She was making me nervous. Hell, you couldn't help but believe this girl. She was every inch a lady, every inch a queen. "And I don't think it'd make any difference with Wally, knowing him as I do," I told her. And I meant it.

"Maybe not," she agreed, "not personally. But don't you see I could never be anything to him. Never marry him, even if he wanted me. I can never marry any man; I'd he too much of a drawback. Any man who'd be willing to take me would be cut off from all of his friends, from his old life entirely. He'd have to go into ignominious hiding with me. It's just impossihle. But I do—I do think a great deal of Wally. I've watched and watched him when he didn't know."

The rich red lips were trembling and the tears were frankly oozing now. "Why, you poor kid!" I had to say. "You poor kid."

"Don't pity me," she begged, drying her tears. "I hate to be pitied."

"Wait a minute, wait a minute," I said, getting an idea that I hated to think of myself. "Wally's been badly burned about his face, the doc tells me. He's all bandaged up now. Suppose now he should he—marked. Would that make any difference?"

A flash of hope made those big eyes two hlue stars. "Why, why, it might." Then the glad light died out. "Oh, but that can't happen to Wally. It *can't*. The surgeons do such marvelous things now. He'll he all right."

I wished then that I thought he would. Of course I couldn't believe Wally wouldn't get well hut I had an awful feeling about him in the middle of me. And here this girl was bursting her heart for him. I felt damn useless all of a sudden and got out of that deep chair a lot easier than I'd ever have believed.

"Well, I guess I'll have to leave, Miss Vaughn," I drooled, feeling helpless as a rahbit all of a sudden. "But I'll call you first thing tomorrow when I find out how he's coming. All right?"

"That's fine of you," she said, dropping her veil again. "I work tonight hut will he in any time after eight in the morning."

And that's the way we left things.

THEY called me from the hospital before six next morning, asking me

to get there as soon as I could. Scared as a Venusian deserter, I beat it for there as fast as ever I moved.

Wally was in delirium and was calling for Elsa, they told me. Who was Elsa? Where could they locate her? Wally was dying, hut there was a chance he might pull through if only they could get her to his bedside. It might renew his will to live, they believed.

So I went in and sat hy him and listened to the poor guy call for her, sick at the stomach myself and chewing my nails until eight o'clock when I could call the gal. He even began moaning for me to hring her to him. Me! Bless him; even in the fevered mind he relied on his old buddy. And me worrying how the hell this was going to work out, worrying about him getting well at all and about what would happen when and if he did.

Elsa Vaughn answered her phone at eight on the dot and I spilled her the news. She was crying when I finished.

"You say his eyes are bandaged and have to stay that way for a few days?" she sohbed. "He can't see me?"

"That's right," I gulped, almost as sorry for her as for Wally.

"I'll come out then," she resolved. "At least I can do that for him."

So she came and she took my place at Wally's side and she held his hand and talked with him in that soothing voice until she had him in his right mind again. And the doctors and the nurses, tip-toeing in and out, shook their heads and marveled at the miracle that was taking place before their eyes. It took about three hours until he drifted off into a natural sleep and Elsa Vaughn glided out at the doc's heckoning. I sneaked a look at Wally's chart and saw his temperature was down from a high of 104.2 to just a little over a hundred. How do you like that?

The girl told her story to the doc and he promised that her secret would be kept from the patient. She agreed when he asked her to come every day while the bandages were over his eyes hut would go no further. There was a kind look to the doc's sour mug that made me like him better.

I saw Elsa Vaughn home after that, proud as hell of her on the way, veil or no veil.

SHE kept her word and spent more and more time at Wally's side. I don't know when the girl ever got any sleep, working nights and being there days.

And the way Wally made love to her was something to see. It made me get up and out most of the time, especially when he'd stroke her hair and eyes and run his fingers over her face saying over and over, "You're heautiful, beautiful. I can't wait till I can see you, dear." The girl would have to wipe away her tears as fast as they'd start running down her cheeks so he couldn't feel them. And that was just too much for an old hard-hitten cuss like me.

After ahout eight days the doc said he was going to unhandage Wally's face, so Elsa and I waited in the lounge for word from inside. When it came it was another jolt. A tough one.

The doc looked like an undertaker again. "He's blind," he told us. "Not marked, hut totally blind."

Then Elsa Vaughn did hreak down. And I had to take a stroll again while the nurse tried to get her feeling better. I can see a guy get blown to bits—if he isn't a huddy—without hatting an eye, hut damned if I can stand a femme turning on the weeps. When they're real—like these were. But I was soon back with Elsa.

She quit crying quick-like and a shine came into those big eyes. "I can; I will," she exulted. "Oh, don't you

see?—it's my chance. I'll marry him and love him and be his eyes. I'll see for him and do for him and he'll never know about my—about how I look."

There was a girl. She hounced into Wally's room and spilled the good news to him, laughing and crying in turn. Baring her heart and soul to the guy and him turning his head away from her caresses and words. It was no good.

Why? Because Wally wouldn't listen to making himself a hurden to anyone, especially a heautiful young girl. No, he'd spend the rest of his useless life in a veteran's hospital dreaming of what might have been. Go away, Elsa —forget. Beat it, Yoost. His bitterness got to me, what I mean.

The girl just stood there with a look in her eyes like a kicked dog. Her chin quivered.

"I suppose I was a fool," she whispered, "to hope even that." She bent down swiftly then and kissed the poor guy on the corner of his mouth you could see.

"Go, please," be choked, "before I go completely nuts. Both of you."

With a tearing little soh, the girl turned and reeled blindly out of the door as if she hardly had strength to make it.

I stood there like a dumb ox for a minute and even the pretty nurse's melting looks didn't register with me at all.

"Scram, Yoost," said Wally. "I know you're there and I want to be alone. I mean it, boy."

So there was notbing to do but beat it.

THEN was wben I started going haywire. I was disgusted with life and suddenly mad clear through. Why in hell did things like this have to happen to prefectly swell folks like Wally and Elsa, to two kids who were so much in love and who could have been so damn happy together if things had been different? I was going to do something about it, so help me.

My first stop was G.H.Q. and I barged into Tompkins' office, knocking over chairs and things like a hull in a china shop. The top hat stiffened when he saw me hut I didn't even salute, I was so riled up.

"Has any other doc examined Wally's eyes?" I demanded.

Tompkins forgot to be sore at me. "Eyes?" he asked.

"Don't you know the guy's blind?" I yowled. "They saved him from a badly scarred mug but let him lose his sight. My huddy!"

Tompkins actually paled. "Why, I didn't know," he sort of apologized. And he reached for the phone. "Get me the hospital," he told his secretary.

In a minute he was sbooting rapid-fire questions at the doc and was looking graver and graver at the answers he was getting. When he hung up he was as gloomy as the doc bimself.

"There's no chance for him," he sighed heavily. His beefy face was still white and his jowls twitched with emotion. "The only man in the solar system who could possibly restore his sight isn't available."

"Who's that?" I demanded. "And why isn't he available?"

They may have called me Eustace but that didn't keep me from inheriting the nerve of a Mercurian fire-lizard.

"The only man is Dr. Goodspeed, the famous eye surgeon, and he's in the Martian drylands, dying of T.B."

I do get an idea once in a while. "Hell," I said, "what's to hinder one of his associates bere doing it under instructions hy etherphone? It's heen done before — other kinds of operations."

Tompkins' color returned and bis heels clattered to the floor, giving me the jumps. "By George, maybe you've

got something there," he admitted.

And then he got going like a house on fire. I never saw the top hat move so fast and didn't think it was in him. He just about dragged me witb him as he made a bee line for the bospital. And there he had the whole staff running around like maniacs in no time at all.

They wheeled more apparatus into Wally's room than is in the central automatic relay room of a space liner. Doctors began arriving from all over the map. And they soon had Doc Goodspeed on the etherphone. He didn't look so bad to me; the drylands were doing him a lot of good, you could see that.

Wally got kind of excited at all the commotion and was worse when they began shining lights into his sightless eyes. Told them they were burning out bis lamps. So they gave him a shot in the arm that put him sleepy-bye.

Well, to make a long story short, this Goodspeed examined his eyes inside out — through forty million miles of space—deciding the job could be done by using a special technique of his own. A Dr. Holcomb, who, the nurses told me was the best eye man outside of Goodspeed himself in the solar system, was picked to do the actual work. And an appointment was made for a full hour etherphone connection at ten that same night. They'd operate then, long distance. Which made me wonder if Elsa Vaughn would be at Central to clear the important connection. I'd give her a ring anyway and give her the good news.

So I had to go away from there to a phone hooth and let myself in for a lot more grief.

ELSA was home all right and cried some more wben I told her what was going on. But she'd made up her mind to leave Terra and just go out of Wally's life for keeps. Sbe was happy as the devil over wbat the doctors bad said hut more than ever sure she had no chance at all with Wally. The ailment sbe had was more a disgrace than anything else and a disfigurement besides. The doctors couldn't do anything for her. No one could do anything. So she had quit her job and was packing. Yes, she'd stay around until she heard the result of the operation but there was no use of me trying to see her or to persuade her to remain and try again. I knew she meant it, too, when she finally hung up.

How do you like that? I was so upset and muddled I didn't know what to do with the hours that were left until ten that night. So I went down to the shore and looked up tbe old Martian quarter where I knew I could get a couple of shots of good old dryland *chulco*. I needed them.

When I get a couple of hookers of that triple-powered redeye under my belt it always calls for a couple bundred. So I wound up with a roaring but dignified skin-full by ten-thirty. I hadn't forgotten tbe operation, not for a minute, so I laid off the stuff and hung on the phone until it was over.

The operation was a success. Wally'd see again! And that called for still more *chulco*.

So, feeling so good about my buddy and so bad ahout Elsa Vaughn, I eventually graduated to the stage of a crying jag. And I found myself crying on the shoulders, first one and then the other, of a dignified litle Mercurian who wasn't squiffed at all—or hardly at all. He would be, thougb, if he tried to keep up with me.

"What is tbees trouble you so greatly deplore?" he inquired politely. "Perhaps it is that I could be of assistance."

Since Terra cleaned up the planet of those little babies they'd been like that

when they settled here. And lots of the better ones did settle amongst us, those that were sick of tyranny anyway.

So I spilled the whole thing to this guy—Yeoto, his name was, or something that sounded like that—and be got jittery with some excitement he didn't want to talk ahout in public.

"It is, fortunately, witbin Yeoto's power to help you," he swore. "But come with me to my quarters and elucidation shall be made."

For all I knew or cared, this might have been a blind for a good old fashioned rolling. Anyway, I walked right into whatever it was. And that was my lucky nigbt.

This hird turned out to be an expert dermatologist—funny, I can spell that now hut couldn't even say it then—who'd been exiled from Mercury. Guess what for? For removing those supposedly permanent green slave-marks!

HE HAD the evidence, too. Color photos—you know, the hefore and after kind. And he talked to me ahout pigmentation until I began to feel green in the puss myself. Maybe I was at that; he kept on feeding me *chulco* and that's liahle to do anything to you.

Anyway, he wanted two grand for the job, which wasn't hay. It just happened that I had a little over two thousand saved up, whicb I didn't care any more for than I do for my right arm. But, what the bell; I wanted to see Wally and tbe girl happy, didn't I?

So I snaggled onto this Yeoto and, making him bring his bag of tools and dope along, grabbed a cab for Elsa's apartment.

She had left, bag and baggage!

After that I remember dimly asking a lot of questions of a sleepy-eyed but pompous doorman, of starting for the Terra-Mars Spaceport with Yeoto, and of catching the girl just when she was boarding the liner that took off in a few hours from then. I must have made a scene and I was certainly getting pretty well along the road to a pass-out. Anyway, the cops gathered around In no time at all and they gathered me in. One of them must have conked me because the next I knew I was tossing in a hospital hed with a bead on me that was something, wbat I mean. It was daylight.

As the fog cleared a little, I managed to sit up and take a look around. This wasn't any jail house; it wasn't even a funny ward. It wasn't a ward at all hut a private room. How come?

Seeing a bell push, I squeezed it till my thumb was sore. And all it brought was a grinning orderly.

"So you came to," he cracked. "How do you feel?"

"How do you think?" I hack-cracked. "What day is it?"

"Your lucky one," be said. "Your girl's waiting to see you."

"*My* girl. Don't be foolisb, fellow. They don't make any that'd fall for me."

"Well, sbe paid for your room last night. A Miss Vaughn."

"Elsa!" I gasped, beginning to remember. "How long have I heen out?"

The guy looked at his watch. "Twelve hours," he announced.

"Time's wasting," I yawped, tumbling out of bed and diving for the bath room. "Give me five minutes to shave and dress and I'll be ready for visitors—or to go out."

Tbe guy beat it, grinning like a fuzzwit.

WELL, the rest you can just about guess. All but the first and best part of what bappened.

Elsa came in with a breezing rush. And was she a dream! No celluloid glamor gal could be more of a knock-

out. And I hope to turn all the colors of the rainbow if there was a tinge of green in her skin. It was the skin of a baby, smooth and pink and—mmmm!

She kissed me smack on the place you're supposed to be kissed. And then she talked a blue streak, thanking me over and over.

Boiled as I'd been, it seemed as if I'd done the right thing through it all. Yeoto put over his sales talk and had fixed her up. Wally was doing great and would be up in a couple of weeks when his fractures were healed. They were to be married as soon as this was a fact. And I was to be best man.

How do you like that?

"Swell," I told her, wishing my split skull wouldn't keep opening and shutting like an inquisitive oyster. "Everybody's happy, even me. Now I can go back into the Service and not have a screwball banging around the etherphone going batty over a voice."

The voice rippled out a silvery tinkle of laughter. "That's what you think," said Elsa Vaughn. "I've already signed up in the Service myself and General Tompkins, the old dear, assigned me to the new ship you and Wally are getting. I'll be your etherphone operator and Mess Sergeant as well."

And that was that. All I have left to say is that my two Gs were well spent. But don't tell Elsa or Wally about that, will you?

« « SHIPS OF STONE » »

BY KEN KOBER

TOWARD the end of World War I the Fred T. Ley & Co., Incorporated, built the steamship *Selma* in record time. The ship's hull was made entirely of stone, reinforced with steel rods. In short, the Selma was made of reinforced concrete.

Today in British waters the concrete vessel is again trying to make a comeback. Sir Owen Williams, a noted English engineer, has designed the stone monster. It has a displacement of 4,000 tons, can carry 2,000 tons dead-weight of cargo, and is as fast and as sea-worthy as any steel ship. Only close inspection reveals that it is made of stone instead of steel.

While the first concrete ship of this war rests alongside a dock somewhere in England another one is on the ways under construction. Both of the ships have been built entirely by building labor. No skilled ship builders have had to be used in their construction, and none of the elaborate equipment of the ordinary shipbuilding yard has been found necessary.

Both vessels are 265 feet long, 42 feet wide, and 21 feet deep. They have been built on the same mold, but the second ship has undergone improvements in design that have resulted in economy in the use of steel and at the same time have increased her pay load by more than 500 tons.

Blond-haired Sir Owen Williams toiled for a full year perfecting his designs for the first concrete cargo carrier. For four weeks he squinted at calculations and blinked at drawings to determine the flexibility and strain on every portion of his stone sea-going goliath. He knew that his ship would have to ride the roughest of seas and he remembered that during World War I some concrete ships had the nasty habit of cracking. He's sure his ships won't crack.

Says Sir Owen: "I do not suggest that all-concrete ships will ever replace steel ones, but there is a real place for them in war-time. Compared with a steel ship of the same size and the same carrying capacity, my ship represents a saving of forty per cent in metal requirements alone. Production costs are also much cheaper."

Engineers in this country have for years been experimenting with concrete ships. As yet none have been built during this war, but the suggestion has been put to the Maritime Commission and is under consideration. Proposed plans call for dozens of ships being turned out from a single mold. "With enough molds we can turn out three or four hulls a day," says a spokesman.

Scientific

EXPLORERS AGREE THAT THE FARTHER ONE TRAVELS INTO AMAZON JUNGLES THE **LIGHTER** BECOMES THE SKIN OF THE NATIVE INDIANS. THE **MASKIS** TRIBE IN WAIKANO TERRITORY HAVE LIGHT SKINS AND LONG SKULLS . .

WM. M. McGOVERN IN HIS "JUNGLE PATHS *and* INCA RUINS" INSISTS THAT THE DARK SKINNED AMAZON INDIANS TABOO MATING WITH THE LIGHT **MASKIS** SPECIES, WHOM THEY DESPISE.

TOTEM POLES ARE THE **HISTORY PAGES** OF INDIAN LONG LOST PAST; A RECORD OF THE **TRIBE** WHO DESIGNS AND BUILDS THEM.

SCIENCE IS ESTABLISHING CORRECT RECORDS OF THE DEAD PAST BY **DISCOVERING** NEW FACTS OF THE MESOZOIC WORLD; **RECORDS** OF DRAGONS THAT ROAMED THE SWAMPS OF WYOMING BEFORE MAN'S EXISTENCE.

Mysteries

MYSTERY OF MAN'S MIGRATIONS

By L. TAYLOR HANSEN

Just what is the relationship that exists between the various races of man; the white, the black, the yellow, the brown, the red? Where did these races originate?

HOW are the races of man related to one another?

As far as it is possible to ascertain, what was the homeland of each race?

What constitutes a Negroid Type?

Where did the American Indian come from?

Why do so many widely-separated tribes of savages such as South Sea Islanders, Indians and Negroes have feather-decorations, similar types of dances and certain symbols in common?

What does geology say about a sunken Atlantis or a sunken Lemuria?

Amazing as it may seem, these questions are inter-related. Although they go rather deeply into several different branches of science they must be discussed from a triple basis of geology and anthropology as well as all of the minor sciences which go into a thorough understanding of archaeology. Furthermore, any savant, no matter how learned in his own science, who attempts to discuss any of these questions without a thorough knowledge of the other fields, finds himself enmeshed sooner or later in some peculiar errors.

Now since we must have a point of approach, let us take "The Origin of the American Indian," a thorough discussion of which is bound to lead us into adjacent fields in quest of an understanding of the ancient world. For example, we note that racially, the Indian seems to be the product of great inter-mixture, but in the most mountainous districts, and along the edges of the continent (the points which one always searches for the original inhabitants), we find some diverse types. As we come west in the United States, the hawk nose flattens and the stature shrinks. Another and perhaps more remarkable fact that must make itself felt for its reversal of the usual, is that in the very districts where we should have every reason for expecting to find darker skin, namely the Amazon jungles, the skin becomes unaccountably lightened. Many explorers have commented upon this unusual fact, but McGovern in his "Jungle Trails and Inca Ruins" is the most insistent, noting that the further one goes into the interior, the lighter becomes the skin of the natives. Finally, in the upper edges of Waikano territory he found a tribe which was extremely despised by its darker-skinned neighbors and kept under a strict marriage taboo. These people who called themselves Makis or Maskis, had long skulls, long, thin light-skinned faces and their light brown hair made a startling contrast to the round skulls, round and dark-skinned faces and black hair of their neighbors. Apparently they had no traditions, or were afraid to tell them in the presence of their more powerful neighboring tribes. Such facts as this one, make a single origin for all American Indian tribes a matter of extreme improbability.

The first explanation for these almost-white Maskis is that they were perhaps the descendants of some lost Spaniards, thus also accounting for their despised condition.* Yet the scholar, who has studied the Indian, will remember the dazzling civilization of Chan-Chan built upon the Moki or Moski River, that city of red-haired seafarers and merchants of unknown origin who arrived in South America with a fleet of ocean-going ships bearing a brilliant court, and whose millennium-long history was brought to a sudden end by the rising power of the Incas.

IT IS tracing out the origin of such people as the Chimus or the Moskis, that we are forced to seek an answer among the ocean-going peoples of the world, and our search demands a knowledge of the Europe, the Asia and the Africa of that day.

If we approach the problem of the Indian through his own styles of pottery-making and jewelry, we inevitably get into a study of his symbolism. And as soon as we do this, it seems as if the ghosts of old Egypt and India are standing at our sides for we cannot shut out the striking likenesses, as with startling multiplication they are borne upon us.

Nor are we able to shut out the world of Pharaohic Egypt, even if we finally learn to approach the Red Man's lore from his own stand-

* Hatred for the conquerors.

point—that of totemism. For if we listen to the Indian's stories without a knowledge of the most ancient recorded and legendary history of mankind, we listen to the fairy tales of children. Yet if we have acquired this knowledge, and are able to identify the great world-encircling totems, this same story which the Red Man is telling us may suddenly take on a new significance, and we are hearing the pages of a long-lost history—a fragment which we greedily snatch and attempt to fit into the picture-puzzle of the whole.

For example, our friend, a Chippewa story-teller, speaks of an earth-shaking struggle between the Thunder-bird and the Snake. The Feathered Monster won, but the Serpent, which is the creature of water, caused the oceans to overflow and cover the earth. He assures that this happened untold ages ago—long before the terrible war between the Sun and the Moon, when the Moon won and drove the Sun from the sky.

To our question as to his origin, he informs us that the tribe which he calls his, came through the four caves of the Underworld. This happened, he assures us, after the Great Flood.

What are the meanings of these riddles? Even if, like the elephant's child, one is not easily discouraged from asking questions, nevertheless one cannot learn the answers in a hurry. The reason is often that the story-teller himself does not know the full symbolical meaning. He simply knows that the fragment is a part of a lost knowledge. Thus we must place the story upon a shelf of our memory, as it were. It is almost never entirely lost. A supplementary tale from a neighboring tribe, or a people half way around the world, and the long-neglected story shines with a new meaning.

There is one everpresent danger from which every true investigator must be on his constant guard. It is the possibility of being carried away by a theory. Thus anthropology and geology must act as brakes upon the stories of legend, for we must recognize and weigh the tendency of the story-teller to exaggerate.

However, we must insist upon one fact. Nothing is more fantastic nor marvelous than the discoveries of coldly calculating scientists who couch the descriptions of the wonders they describe in such involved terminology.

NOR can we insist too strongly upon the interdependency of the sciences. When we start asking questions, we can never tell where the trail of the answers may lead. We will discover, however, that question-asking is a never-ending process. When we have satisfactorily answered one question, the answer brings five more questions, and the answers to these lead to twenty-five. Thus our study of legends leads to totemistic powers, which in turn starts us studying the earliest civilizations. This inevitably leads to an attempt at a better understanding of racial migrations. Such a subject always involves ancient climates and the reason for such cataclysmic changes as floods and famines, and thus we find ourselves in the realm of geology, which, in turn, unveils a new conception of earth-change, so fantastic and so colossal that our imagination is staggered at its full implications.

Let us, then, begin this story of the long-distant past with the scientific revolution which is taking place in the field of geology, and thus in order to see the pageant of events in their correct sequence, we must review what science is daily discovering of the Mesozoic World, before the time of man, when giant dragons roamed through the swamps of Wyoming, and there was, apparently, only one true ocean. For the two, massive continental shields of that day, were drifting toward a colossal collision, in which sea-floors would be twisted up into mountain ranges, the consequences of which, millions of years later, would be the consecutive destructions of man's first great ocean-going civilizations. . . . Thus man's story properly begins with the reconstruction of — Ancient Gondwanaland.

CAPTAIN STINKY

(Concluded from page 175)

hoard your ship and make sure that everything was ship-shape."

Captain Ebenezer scratched his beard and felt a twinge of conscience. The irregularity of answering 'O.K.' hadn't occurred to him until now. He had been so mad when the Martian sprayed *leeka* juice over the floor of his bridge that he could hardly see straight, let alone think straight.

Still, there was no sense mentioning that now.

He straightened and looked the Admiral square in the eye.

"Thank you, Admiral," he said. "After all, us masters has a certain responsibility toward each other. Any way you look at it we all depend on each other."

The Vice-Admiral nodded gravely.

"My sentiments exactly," he said.

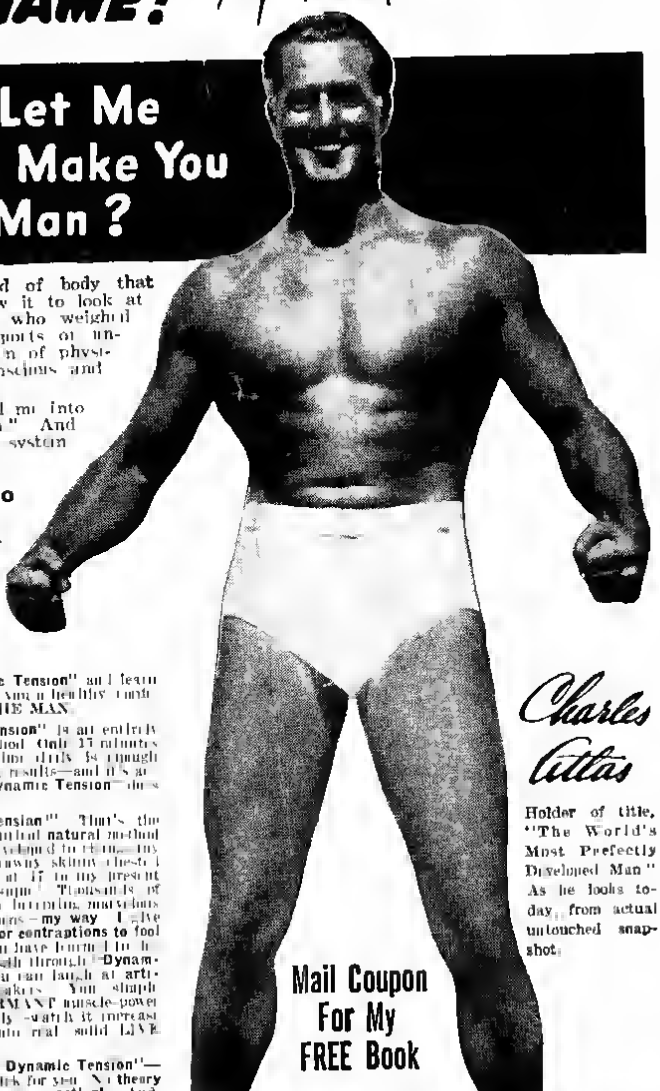
He shook hands again with Captain Ebenezer, the two men saluted stiffly, and Ebenezer marched from the splendor of the Admiral's office, wearing a ten tooth grin, his numerical best.

How to Make YOUR Body Bring You FAME

... Instead of SHAME!

ARE YOU Skinny? Weak? Flabby?

Will You Let Me Prove I Can Make You a New Man?



I KNOW what it means to have the kind of body that people pity! Of course, you wouldn't know it to look at me now, but I was once a skinny weakling who weighed only 97 lbs.! I was ashamed to strip for sports or undress for a swim. I was such a poor specimen of physical development that I was constantly self-conscious and embarrassed. And I felt only HALF-ALIVE.

But later I discovered the secret that turned me into "The World's Most Perfectly Developed Man." And now I'd like to prove to you that the same system can make a NEW MAN of YOU!

What Dynamic Tension Will Do For You

I don't care how old or young you are or how ashamed of your present physical condition you may be. If you can simply raise your arm and flex it I can add SOLID MUSCLE to your biceps—yes, on each arm—in double-quick time! Only 15 minutes a day—right in your own home—is all the time I ask of you! And there's no cost if I fail.

I can broaden your shoulders, strengthen your back, develop your whole muscular system INSIDE and OUTSIDE! I can add inches to your chest, give you a vise-like grip, make these legs of yours lithe and powerful. I can shoot new strength into your old backbone, exercise those inner organs—help you cram your body so full of pep, vigor and red-blooded vitality that you won't feel there's even "standing room" left for weakness and that lazy feeling! Before I get through with you I'll have your whole frame "measured" to a nice new, beautiful suit of muscle!

Only 15 Minutes A Day

No "ifs," "ands" or "maybes." Just tell me where you want handsome powerful muscles. Are you fat and flabby? Or skinny and gawky? Are you short-winded, peptless? Do you hold back and let others walk off with the prettiest girls, best jobs, etc.? Then write for details about **"Dynamic Tension"** and learn how I can make you a healthy, confident, powerful HE-MAN.

"Dynamic Tension" is an entirely NATURAL method. Only 15 minutes of your spare time daily is enough to show amazing results—and it's as manly fun! **"Dynamic Tension"** does the work.

"Dynamic Tension"! That's theticket! The identical natural method that I myself developed to remake my body from the scrawny, skinny chested weakling I was at 17 to my present super man physique! Thousands of other fellows are becoming marvelous physical specimens—**my way**. I give you **no gadgets or contraptions to fool with**. When you have learned to develop your strength through **"Dynamic Tension"** you can laugh at artificial muscle-makers. You simply utilize the DORMANT muscle-power in your own body—watch it increase and multiply into real, solid LIVE MUSCLE.

My method—**"Dynamic Tension"**—will turn the trick for you. No **theory**—every exercise is **practical**. And many **so easy**. Spend only 15 minutes a day in your own home. From the very start you'll be using my method of **"Dynamic Tension"** almost unconsciously every minute of the day—walking, bending over, etc.—to BUILD MUSCLE and VITALITY.

Charles Atlas

Holder of title, "The World's Most Perfectly Developed Man." As he looks today, from actual untouched snapshot.

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(See page 271 for details)